

Answers To Questions Used In

**APPLIED BUSINESS**

**MATHEMATICS**

(Part 2 of 2—Pages 305 to 554; Revised 1981)

(This is Part 2 of the same customized book—they are original page numbers 305 to 554. Part 1—which does appear elsewhere on any computer—has page numbers 1 to 304.)



Section 52.

Unit 11.

Part 52a: Review Assignment 52a.

Exercise 1 (for Part 52a),

and Exercises 1-4 (for Review Assignment 52b).

Section 52.

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$$\begin{array}{r} \overset{3}{1} \\ 1-1. \text{ a. } \$160.00 \\ \times .0613 \\ \hline 96000 \\ 16000 \\ \hline 96000 \\ \$9,808,000 \\ = \$9.81 \end{array}$$

$$\begin{array}{r} \overset{5}{2} \\ 1-1. \text{ b. } \$192.00 \\ \times .0613 \\ \hline 57600 \\ 19200 \\ \hline 115200 \\ \$11,769,600 \\ = \$11.77 \end{array}$$

$$\begin{array}{r} \overset{5}{2} \\ 1-1. \text{ c. } \$209.00 \\ \times .0613 \\ \hline 82700 \\ 20900 \\ \hline 125400 \\ \$12,811,700 \\ = \$12.81 \end{array}$$

$$\begin{array}{r} \overset{3}{x} \\ 1-2. \text{ d. } \$250.00 \\ \times .0613 \\ \hline 75000 \\ 25000 \\ \hline 150000 \\ \$15,325,000 \\ = \$15.33 \end{array}$$

$$\begin{array}{r} \overset{4}{1} \\ 1-2. \text{ e. } \$318.10 \\ \times .0613 \\ \hline 95430 \\ 31810 \\ \hline 190860 \\ \$19,449,530 \\ = \$19.50 \end{array}$$

$$\begin{array}{r} \overset{3}{1} \overset{4}{2} \overset{4}{8} \\ 1-2. \text{ f. } \$425.68 \\ \times .0613 \\ \hline 127704 \\ 42568 \\ \hline 255408 \\ \$26,094,184 \\ = \$26.09 \end{array}$$

$$\begin{array}{r} \overset{3}{1} \\ 1-2. \text{ } \$9,500.00 \\ \times .0613 \\ \hline 2850000 \\ 950000 \\ \hline 5700000 \\ \$582,350,000 \\ = \$582.35 \end{array}$$

$$\begin{array}{r} \overset{5}{6} \\ 1-3. \text{ } \$16,800.00 \\ \times .081 \\ \hline 1680000 \\ 13440000 \\ \hline \$1,360,800,000 \\ = \$1,360.80 \end{array}$$

$$\begin{array}{r} 1-4. \text{ } \$2,500 \\ 12 \overline{) \$30,000} \\ \underline{24} \phantom{00} \\ 6000 \\ \underline{6000} \\ 0 \end{array}$$

- a.  $1 \times \$2,500 = \$2,500$ ;  $\$2,500 \times 6.13\% = \$153.25$ .  
 b.  $8 \times \$2,500 = \$20,000$ ;  $\$20,000 \times 6.13\% = \$1,226.00$ .  
 c.  $\$25,900 \times 6.13\% = \$1,587.67$ .

## Section 52.

Review Assignment 52a- Part 52b.

Exercises 1-6 (for Review Assignment 52a),  
and Exercise 2 (for Part 52b).

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Exercises  
52a.

1. a. \$43.75 is  $\frac{5}{6}\%$  of \$5,250.  
 b. \$161 is 8% less than \$175.  
 c. 31 miles  $\div$  \$1,000 = 0.031.  
 d. 625 grams is  $12\frac{1}{4}\%$  of 5 kilograms.

2. Dress, \$29.45. Sales tax, \$1.47.  
 Coat, \$38.50. Sales tax, \$1.93.  
 Suit, \$7.98. Sales tax, \$ .40.

$$3. \quad 10 \times \$21 = \$210; \$210 + \$30 = \$240; \\ \$240 - \$225 = \$15.$$

$$4. \quad \$4,750 + \$5,000 = \$9,750; \\ \$9,750 - \$6,350 = \$3,400; \\ \$3,400 \div 4 = \$850.$$

$$5. \quad 21 \text{ mi.} \div 36 \text{ mi.} = 0.58; \\ 0.58 \times 60 = 35 \text{ mph.}$$

6. a. \$56.25 is 25% greater than \$25.  
 b. \$7.50 is  $33\frac{1}{3}\%$  less than \$11.25.

Part 52b:

2-b.	Worker	Average Monthly Earnings	Period in yrs	Monthly Earnings
a.	Kay Hall	\$5,200	63	\$227.40
b.	Ellis Kohler	8,400	65	462.20
c.	Steve Malik	4,400	64	278.10
d.	Madine Ghomeli	900	65	114.30



Section 52.  
Part 52b.  
Exercises 2-3.

2-2. Claimant: Harvey Kirsh.

Age: 64.

Yearly earnings: \$7,600.

Monthly benefit: \$408.00.

2-3. Yearly earnings: \$8,000.

$\$392.70 - \$362.50 = \$30.20$ .

2-4. Claimant: Eleanor Lum.

Age: 52.

Yearly earnings: \$7,200.

Monthly benefit: \$418.70.

3-1. Claimant: Fred Kemp.

Age: 65.

Yearly earnings: \$4,000.

Fred's monthly benefit (a): \$278.10.

Wife's monthly benefit at age 65 (b): \$139.10.

Total monthly benefit (c): \$475.90.

3-2. Claimant: Sara Harte.

Age: 63.

Yearly earnings: \$7,200.

Sara's monthly benefit (a): \$362.90.

Husband's monthly benefit at age 65 (b): \$209.40.

Total monthly benefit: \$738.70.

3-3. Claimant: Jean Drago.

Age: 65.

Yearly earnings: \$8,000.

Dependent children: 1.

Total monthly benefit:  $\$453.10 + \$226.60 = \$679.70$ .

## Unit 11.

## Section 52.

Part 52b - Review Assignment 52b.

Exercise 3 (for Part 52b),

and Exercise 1 (for Review Assignment 52b).

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Exercise 3  
(continued).

3-4. Claimant: David Vega.

Age: 62.

Yearly earnings: \$3,000.

(a) Monthly benefit: \$189.20.

(b) Least amount dependents will get: \$118.25.

(c) Least benefit Vega's family will get: \$307.40.

(d) Most amount any family can get at \$3,000: \$362.50.

3-5. Claimant: Helen Lee.

Age: 42.

Yearly earnings: \$4,000.

Number of dependent children: 4.

Average monthly benefit by each child: \$49.30.

a. Lee family's total monthly benefit: \$475.20.

b. Maximum family benefit: \$475.20.

3-6. Claimant: Bruce Hochstetler.

Age: 65.

Yearly earnings: \$5,200.

(a) Monthly benefit at age 62: \$162.40.

(b)  $\$165.60 - \$124.40 = \$41.40$ .3-7.  $\$254 - \$155 = \$99$ ; 39%.3-8.  $\$105 - \$81 = \$27$ ; 25%.

Review Assignment 52b.

1. a. \$405 is 25% smaller than \$540.

b.  $\frac{1}{4}\%$  of \$7,350 = \$24.50.

c. 13 mills = \$.0013.

Sections 52-53.

Unit 11.

Review Assignment 52b - Part 53a.

Exercises 2-7 (for Review Assignment 52b),  
and Exercise 1 (for Part 53a).

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2.  $\$433,125 \div \$8,250,000 = 0.0525;$   
 $0.0525 \times \$1,000 = \$52.50.$

3.  $12 \times \$28.50 = \$342.00;$   
 $\$342.00 + \$35.00 = \$377.00;$   
 $\$345.00 + \$24.15 = \$369.15;$   
 $\$377.00 - \$369.15 = \$7.85.$

4.  $\$25,000 + \$35,000 = \$60,000;$   
 $\$25,000 \div \$60,000 = 0.416; 0.416 \times \$4,500 = \$1,875,$   
 $\$35,000 \div \$60,000 = 0.583; 0.583 \times \$4,500 = \$2,625.$   
Peerless Co.:  $\$1,875.$   
Royal Co.:  $\$2,625.$

5.  $\$270 - \$65 = \$205;$   
 $\$205 \div 5 = \$41;$   
 $\$41 \div \$205 = 20\%.$

6.  $18 \text{ km} \div 27 \text{ min.} = 0.67;$   
 $0.67 \times 60 = 40 \text{ kmph.}$

7.  $\$10.14$ , total sale  
4%, sales tax  
 $\$9.75$ , retail price

Section 53.

1-1.  $\$10,200 + \$205 + \$115 + \$300 = \$10,820$

1-2.  $\$11,540 + \$200 + \$7,800 + \$3,958 + \$233$   
 $+ \$3,450 = \$27,181.$



Unit 11.

Section 53.

Part 53a.

Exercises 1-2.

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Exercise 1  
(continued)

$$1-3. \$18,346 + \$1,783 = \$20,129;$$

$$a. \$1,500 + \$75 = \$1,575;$$

$$b. \$20,129 - \$1,575 = \$18,554.$$

2-1. Adjusted gross income:	\$21,000
Excess deductions:	<u>800</u>
Taxable income:	\$20,200
Exemptions:	<u>1,000</u>
Taxable income:	\$19,200

2-2. Adjusted gross income:	\$45,000
Deductions:	
Total deductions	\$5,400
Zero bracket amount	<u>3,400</u>
Excess deductions:	<u>2,000</u>
Taxable income:	\$43,000
Exemptions (3 x \$1,000):	<u>3,000</u>
Taxable income:	\$40,000

2-3. Adjusted gross income:	\$26,250
Deductions:	
Contributions	\$812
Interest	1,600
State and local	
Charitable taxes	<u>3,150</u>
Total deductions	\$5,562
Zero bracket amount	<u>2,300</u>
Excess deductions:	<u>3,262</u>
Taxable income	\$22,988
Exemptions (3 x \$1,000):	<u>3,000</u>
Taxable income:	\$19,988

Section 53.  
Part 53a.  
Exercises 2-4.

Unit 11.

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2-4.	Gross income:	\$49,500
	Less adjustments:	<u>- 1,200</u>
	Adjusted gross income:	\$48,300
	Deductions:	
	Total deductions:	\$5,600
	Zero bracket amount:	<u>- 3,400</u>
	Excess deductions:	<u>- 2,200</u>
	Tax table income:	\$46,100
	Exemptions (8 x \$1,000):	<u>- 8,000</u>
	Taxable income:	\$38,100

- 3-1. a.  $\$22,200 - \$20,200 = \$2,000$ ;  
 $\$2,000 \times 36\% = \$720$ ;  
 $\$4,510 + \$720 = \$5,230$ .  
b.  $\$25,000 - \$24,200 = \$8,000$ ;  
 $\$8,000 \times 40\% = \$3,200$ ;  
 $\$5,990 + \$3,200 = \$9,100$ .  
c.  $\$20,300 - \$20,200 = \$100$ ;  
 $\$100 \times 36\% = \$36$ ;  
 $\$4,510 + \$36 = \$4,546$ .  
d.  $\$34,000 - \$28,200 = \$5,800$ ;  
 $\$5,800 \times 45\% = \$2,610$ ;  
 $\$7,590 + \$2,610 = \$10,200$ .

- 3-2. a.  $\$39,500 - \$39,200 = \$300$ ;  
 $\$300 \times 45\% = \$135$ ;  
 $\$10,340 + \$135 = \$10,475$ .  
b.  $\$47,200 - \$43,200 = \$4,000$ ;  
 $\$4,000 \times 48\% = \$1,920$ ;  
 $\$12,140 + \$1,920 = \$14,060$ .

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Exercise 3  
(continued).

$$c. \$50,000 - \$47,200 = \$2,800;$$

$$\$2,800 \times 50\% = \$1,400;$$

$$\$14,060 + \$1,400 = \$15,460.$$

$$d. \$56,400 - \$55,200 = \$1,200;$$

$$\$1,200 \times 53\% = \$636;$$

$$\$18,060 + \$636 = \$18,696.$$

$$3-3. a. \$30,000 - \$28,200 = \$1,800;$$

$$\$1,800 \times 41\% = \$738;$$

$$\$6,980 + \$738 = \$7,718.$$

$$b. \$22,250 - \$22,200 = \$50;$$

$$\$50 \times 35\% = \$17.50;$$

$$\$4,800.00 + \$17.50 = \$4,817.50.$$

$$c. \$25,200 - \$24,200 = \$1,000;$$

$$\$1,000 \times 36\% = \$360;$$

$$\$5,500 - \$360 = \$5,140.$$

$$d. \$21,540 - \$20,200 = \$1,340;$$

$$\$1,340 \times 32\% = \$428.80;$$

$$\$1,340.00 + \$428.80 = \$1,768.80.$$

$$4-1. a. \$24,500 - \$24,200 = \$300;$$

$$\$300 \times 40\% = \$120;$$

$$\$5,990 + \$120 = \$6,110.$$

$$b. \$6,200 - \$6,110 = \$90 \text{ (refund).}$$

$$4-2. a. \$40,000 - \$39,200 = \$800;$$

$$\$800 \times 45\% = \$360;$$

$$\$10,340 + \$360 = \$10,700.$$

$$b. \$10,700 - \$10,457 = \$243 \text{ (balance due).}$$



# Section 53.

Unit 11,

Part 53a - Review Assignment 53a.

Exercise 4 (for Part 53a),

and Exercises 1-2 (for Review Assignment 53a).

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4-3. a.  $\$23,980 + \$245 = \$24,225;$

$\$24,225 - \$1,635 = \$22,590;$

$2 \times \$1,000 = \$2,000;$

$\$22,590 - \$2,000 = \$20,590;$

$\$20,590 - \$20,200 = \$390;$

$\$390 \times 32\% = \$124.80;$

$\$4,160.00 + \$124.80 = \$4,284.80.$

b.  $\$4,665.00 - \$4,284.80 = \$380.20$  (refund).

1. adjusted gross income: (c) Gross income less adjustments.

deductions: (e) Allowable expenses.

exemption: (f) Amount of income free from tax.

gross income: (b) Total incomes.

taxable income: (g) The base for figuring tax with tax rates.

tax return: (a) A form used to figure and report income tax.

tax table income: (d) Amount used to find tax in a table.

2. a.  $\$8.75$  is  $\frac{1}{4}$  greater than  $\$7.00$ .

b.  $300\%$  of  $\$22.50$  is  $\$67.50$ .

c.  $\$15.60$  is  $\frac{2}{3}\%$  of  $\$2,340$ .

d.  $28 \text{ mills} = .028$ .

e.  $\$750 \times 9\%$  ( $\$67.50$ ) for 27 days  
 $= \$5.06,$

f.  $180 \text{ m}$  is  $25\%$  less than  $240 \text{ m}$ .

## Unit 11. Section 53.

Review Assignment 53a - Part 53b.

Exercises 3-7 (for Review Assignment 53a),  
and Exercise 5 (for Part 53b).

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Review Assignment 53 (continued)

$$3. \quad \$21,200 - \$20,200 = \$1,000;$$

$$\$1,000 \times 36\% = \$360;$$

$$\$4,510 + \$360 = \$4,870.$$

$$4. \quad 60\% \text{ of } \$33,500 = \$20,100;$$

$$\$20,100 \div \$1,000 = \$20.10;$$

$$\$20.10 \times \$61.20 = \$1,230.12.$$

$$5. \quad \$3,200 + \$3,750 = \$6,950;$$

$$\$6,950 - \$3,950 = \$3,000;$$

$$\$3,000 \div 5 = \$600.$$

$$6. \quad 3:10 \text{ p.m. (15:10)} - 9:45 \text{ a.m.} = 5:25;$$

$$5:25 - 1:15 = 4:10;$$

$$4:10 - :15 = 3:55.$$

$$7. \quad 9 \text{ min.} \div 10 \text{ min.} = 0.9;$$

$$0.9 \times 60 = 54 \text{ mph.}$$

Part 53b. 5%. a.

2% of	\$1,000 =	\$20.00
3% of	2,000 =	60.00
4% of	820 =	32.80
	<u>\$3,820</u>	<u>\$112.80</u>

2% of	\$1,000 =	\$20.00
3% of	2,000 =	60.00
7% of	500 =	35.00
	<u>\$3,500</u>	<u>\$115.00</u>

Section 53,

Unit 11,

Part 53b: Part 53b

Exercise 51: Part 53b

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c.	2% of \$1,000 =	\$ 20.00
	3% of 2,000 =	60.00
	4% of 2,000 =	80.00
	5% of 1,200 =	60.00
	<u>\$6,200</u>	<u>\$ 220.00</u>

d.	2% of \$1,000 =	\$ 20.00
	3% of 2,000 =	60.00
	4% of 2,000 =	80.00
	5% of 2,000 =	100.00
	6% of 2,000 =	120.00
	7% of 1,000 =	70.00
	<u>\$10,000</u>	<u>\$ 450.00</u>

e.	2% of \$1,000 =	\$ 20.00
	3% of 2,000 =	60.00
	4% of 2,000 =	80.00
	5% of 2,000 =	100.00
	6% of 2,000 =	120.00
	7% of 2,000 =	140.00
	8% of 2,000 =	160.00
	9% of 1,800 =	162.00
	<u>\$14,800</u>	<u>\$ 842.00</u>

5.2.	2% of \$1,000 =	\$ 20.00
	3% of 2,000 =	60.00
	4% of 2,000 =	80.00
	5% of 2,000 =	100.00
	6% of 1,450 =	87.00
	<u>\$8,450</u>	<u>\$ 347.00</u>



## Unit 11,

## Section 53,

Part 53b - Review Assignment 53b

Exercise 5 (for Part 53b),

and Exercises 1-7 (for Review Assignment 53b).

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Exercise 5  
(continued).

$$\begin{array}{rcl}
 5-3. & 2\% \text{ of } \$1,000 = & \$ 20.00 \\
 & 3\% \text{ of } 2,000 = & 60.00 \\
 & 4\% \text{ of } 2,000 = & 80.00 \\
 & 5\% \text{ of } 2,000 = & 100.00 \\
 & 6\% \text{ of } 2,000 = & 120.00 \\
 & 7\% \text{ of } 643 = & 45.01 \\
 & \hline
 & \$9,643 = & \$ 425.01
 \end{array}$$

Review Assignment 53b.

$$\begin{array}{l}
 1. \quad \$39,338 - \$39,200 = \$ 138; \\
 \quad \$138 \times 45\% = \$62.10; \\
 \quad \$10,340.00 + \$62.10 = \$10,402.10.
 \end{array}$$

$$\begin{array}{rcl}
 2. & 2\% \text{ of } \$1,000 = & \$ 20.00 \\
 & 3\% \text{ of } 2,000 = & 60.00 \\
 & 4\% \text{ of } 1,734 = & 69.36 \\
 & \hline
 & \$4,734 = & \$ 149.36
 \end{array}$$

$$\begin{array}{l}
 3. \quad \$230.00 - \$35.00 = \$195.00; \\
 \quad \$195.00 \div 6 = \$32.50; \\
 \quad \$32.50 \div \$230.00 = 14\%.
 \end{array}$$

$$4. \quad 130 \text{ mi.} \div 40 \text{ mi.} = 3 \text{ hr. } 15 \text{ min.}$$

$$\begin{array}{l}
 5. \quad \$751,161 \div \$12,214,000 = 0.0615; \\
 \quad 0.0615 \times \$1,000 = \$61.50.
 \end{array}$$

$$\begin{array}{r}
 6. \quad \begin{array}{r} 6.5 \text{ km} \\ 340 \text{ L} \overline{)2210.0} \\ \underline{2040} \\ 1700 \\ \underline{1700} \end{array}
 \end{array}$$

$$\begin{array}{l}
 7. \quad \text{Total sale, } \$19.43 \\
 \quad \text{Sales tax, } 5\% \\
 \quad \text{Retail price, } \$18.50
 \end{array}$$

# Section 53.

General Review:

Exercises 1-4. (Assignment 53b)

and General Review.

Unit 11

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1. a.  $310.7 \times 38.6 = 11,993.02$

b.  $20.6 \div 5.3 = 3.8869565217391304$

c.  $7\frac{5}{6} = 7\frac{15}{18}$

$10\frac{1}{3} = 10\frac{6}{18}$

$5\frac{4}{9} = 5\frac{8}{18}$

$+ 13\frac{1}{2} = +13\frac{9}{18}$

$35\frac{38}{18}$

$= 37\frac{1}{9}$

d.  $17\frac{1}{4} = 17\frac{3}{12}$

$- 6\frac{1}{3} = -6\frac{4}{12}$

$10\frac{11}{12}$

e.  $18\frac{1}{2} \times 6\frac{1}{3} = \frac{37}{2} \times \frac{19}{3} = \frac{703}{6} = 117\frac{1}{6}$

f.  $52\frac{1}{2} \div 2\frac{1}{3} = \frac{105}{2} \times \frac{3}{7} = \frac{45}{2} = 22\frac{1}{2}$

g.  $76\% = \frac{76}{100} = \frac{19}{25}$

h.  $\$16\frac{3}{5} = \$16.60$

2.  $\$64,900 + \$58,720 = \$123,620$

$\$123,620 - \$102,550 = \$21,070$

$\$55,930 - \$21,070 = \$34,860$

3.  $65 + 68 + 75 + 73 = 281$

$281 \times \$1.80 = \$505.80$

$\$56.00 \times 5 = \$280.00$

$\$505.80 - \$280.00 = \$225.80$

$\$225.80 \div \$1.80 = 125.44$

4. Claimant	Gross Wages	FICA Tax
Kerr	\$224.37	\$13.75
Melick	233.59	14.32
Lachs	234.88	14.40

Unit 11. Section 53.  
General Review;  
Exercises 5-11.

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continued.

5. a.  $\$6,500 \times 4\frac{1}{2}\% = \$292.50$ .

b.  $\$9,800 - \$6,500 = \$3,300$ ;

$\$3,300 \times 6\frac{1}{2}\% = \$214.50$ .

6. Div. Int. of 90-day note dated May 15: Aug. 13.  
 $\$540 \times 7\% (\$37.80) \text{ for } 90 \text{ days} = \$9.45$ ;  
 $\$540.00 + \$9.45 = \$549.45$ .

7. a.  $18 \times \$13.75 = \$247.50$ ;

$\$247.50 - \$200.00 = \$47.50$ .

b.  $\$247.50$ .

c.  $\frac{\$13.75 \times 100}{\$247.50} = \frac{\$1,375}{\$247.50} = 5.56\%$ .

8.  $\$410 - \$60 = \$350$ ;

$6\% \text{ of } \$350 = \$21$ ;

$\$350 + \$21 = \$371$ ;

$\$371 + \$7 = \$378$ ;

$\$378 \div 12 = \$31.50$ .

9.  $\$15,000 + \$30,000 + \$35,000 = \$80,000$ ;

National Insurance Co.:  $\$35,000 \div \$80,000 = 43\frac{3}{4}\%$ .

10.  $80 \times \$35.375 = \$2,830.00$ ;

$\$2,830.00 + \$45.47 = \$2,875.47$ .

11. Inv. Account with Judy Williams

Date	Withdrawal	Deposit	Interest	Balance
1961 Jan. 2		\$600.00		\$600.00
Apr. 2			\$7.50	607.50
Jul. 2			7.59	615.09
Oct. 2			7.69	622.78

5% interest a year



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12.  $\$1,450,000 - \$579,800 = \$870,200;$   
 $\$870,200 \div \$9,160,000 = 0.095;$   
 $0.095 \times \$1,000 = \$95.00.$

13.

Linda Brink Reconciliation Statement May 1, 1981	
Checkbook balance: \$635.00	Bank statement balance: \$650.40
Less:	Less outstanding checks:
Service charge \$2.00	#517 \$42.90
Deposit recorded	#518 27.00 69.90
twice in checkbook 52.50 54.50	
Correct checkbook balance: \$580.50	Available bank balance: \$580.50

14.  $\$6.50 = 1,200 \text{ cu. ft.}$   
 $\$9.38 - \$6.50 = \$2.88;$   
 $\$2.88 \div \$ .40 = 7.2;$   
Answer: 1,920 cubic feet.

15. a. Total sales, \$30.68,  
Retail price, \$29.50,  
b. Sales tax, \$1.18 (4%).

Unit 12, Section 54,  
Exercise 1.

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Unit 12, Section 54.

James Lake Balance Sheet May 31, 1981			
<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 500	Crestwood Co.	\$ 1,325
Merchandise	12,400	Singh Craft Co.	750
Acc. Equipment	2,100	Total liabilities	\$ 2,075
Acc. Supplies	420	<u>Capital</u>	
		James Lake, Capital	13,345
Total assets	\$15,420	Total liabilities and capital	\$15,420

1-2.

Lara Davis Balance Sheet May 31, 1981			
<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 2,000	First National Bank	\$ 800
Merchandise	30,000	Bennett Mfg. Company	2,000
Acc. Equipment	150	Total liabilities	\$ 2,800
Acc. Supplies	1,700	<u>Capital</u>	
Prepaid Insurance (1 month)	4,000	Lara Davis, Capital	67,750
Land and building	32,500	Total liabilities and capital	\$70,550
Total assets	\$70,550		



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1-3.

C. V. Graf  
Balance Sheet  
May 31, 1981

<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 1,400	Central Oil Company	\$ 1,300
Merchandise	14,500	Propane Gas Company	1,450
Office supplies	50	Total liabilities	\$ 2,750
Office equipment	700		
Delivery equipment	10,200	<u>Capital</u>	
Land and buildings	25,500	C. V. Graf, Capital	49,600
Total assets	\$52,350	Total liabilities and capital	\$52,350

1-4.

Melissa Melona  
Balance Sheet  
December 31, 1980

<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 5,436	Capital Bundry	\$ 175
Accounts receivable	560	Margo Wholesalers	483
Merchandise inventory	1,243	Total liabilities	\$ 658
Supplies	874		
Equipment	9,750	<u>Capital</u>	
Building	35,000	Melissa Melona	52,205
Total assets	\$52,863	Total assets	\$ 52,863

322

2-1.

Marla Droski Balance Sheet December 31, 1980	
Assets	Liabilities
Cash \$ 436	Mark Food Warehouse \$ 7,120
Merchandise Inventory 28,157	Procter Beverage Co. 680
Store Supplies 375	Total liabilities \$ 7,800
Fixed Equipment 4,216	Capital
	Marla Droski, Capital 25,384
Total assets \$ 33,184	Total liabilities and capital \$ 33,184

2-2.

Eric Hemper Balance Sheet December 31, 1980	
Assets	Liabilities
Cash \$ 3,424	Knitco Corporation \$ 4,655
Account Receivables 2,624	
Merchandise Inventory 85,480	
Store Equipment 13,250	Capital
Fixed Equipment 10,275	Eric Hemper, Capital 117,651
Supplies 1,648	Total liabilities and capital \$ 122,306
Total assets \$ 122,306	

2-3.

Cash	\$ 7,643.10
Accounts Receivable	12,524.65
Merchandise Inventory	134,631.50
Supplies	3,398.00
Equipment	29,463.00
Building	54,770.00
Total assets	\$ 242,430.25
(or liabilities and capital)	



Section 54,  
Review Assignment 54.  
Exercises 1-3.

Unit 12.

323

1. assets: (d) All things of value owned by a business.

balance sheet: (e) A statement showing assets, liabilities, and capital

capital: (a) Owners' claim to assets.

creditors: (c) People to whom money is owed.

inventory: (f) Any list of things, with their values.

liabilities: (b) Creditors' claim to assets.

merchandise inventory: (g) Goods on hand for resale.

2. a.  $280 \times \frac{5}{8} = \frac{280}{1} \times \frac{13}{8} = 455.$

b. March 19 to July 14: 117 days.

c.  $\$460 \times 10\% (\$4.60) \text{ for } 80 \text{ days}$   
 $= \$1.02.$

d.  $18\frac{1}{2} \text{ mills per } \$1,000 = 0.0185.$

6.4 kg

e.  $0.75 \text{ kg} \overline{) 4,800}$   
450  
300  
300

3.

Ray Holmes  
Balance Sheet  
March 1, 1981

Assets		Liabilities	
Cash	\$ 642	Valley Sales Co.	\$ 319
Merchandise Inventory	5,422	Strafer & Brown	462
Supplies	37	Total liabilities	\$ 781
Land and Building	21,500	Capital	
Furniture and Fixtures	1,870	Ray Holmes, Capital	28,690
Total assets	\$29,471	Total liabilities and capital	\$29,471

## Unit 12.

## Sections 54-55.

Review Assignment 54 - Section 55.

Exercises 4-8 (for Review Assignment 54),  
and Exercise 1 (for Section 55).

324

Review Assignment  
54 (continued).

$$4. \quad \$11,800 \div \$100 = \$118;$$

$$\$118 \times \$7,652 = \$902,94.$$

$$5. \quad \$12,600 \div 5 = \$2,520;$$

Lennox's share:  $\$7,560$  ( $3 \times \$2,520$ ).

Shaw's share:  $\$5,040$  ( $2 \times \$2,520$ ).

$$6. \quad \$11.25 \div \$1,500 = .75\%$$

$$7. \quad 4 \times \$,875 = \$3,50;$$

$$\$3,50 \times 125 = \$437,50.$$

$$8. \quad a. \quad \begin{array}{r} 65 \text{ km} \\ 12 \text{ km} \overline{) 780} \\ \underline{72} \phantom{0} \\ 60 \\ \underline{60} \phantom{0} \\ 0 \end{array} \quad b. \quad \begin{array}{r} 65 \text{ L} \\ \times 20 \\ \hline \$13.00 \end{array}$$

## Section 55.

Section 55. 1-1. Sales:  $\$85,526$

Sales Returns and Allowances:  $- 2,088$

Net Sales:  $\$83,438$

1-2. Sales:  $\$35,482.75$

Sales Returns:  $- 1,245.83$

Net Sales:  $\$34,236.92$

1-3. Net Sales:  $\$43,265$

Cost of Merchandise Sold:  $- 27,257$

Gross Profit:  $\$16,008$



Section 55,  
Exercises 1-2.

Unit 12.

325

1-4. Net Sales: \$ 4,452.50  
Cost of Merchandise Sold: 2,582.45  
Gross Profit: \$ 1,870.05

1-5. Sales: \$ 24,362  
Sales Returns and Allowances: 1,706  
Net Sales: \$ 22,656  
Cost of Merchandise Sold: 13,595  
Gross Profit: \$ 9,061

2-1. Merchandise Inventory, July 1: \$ 54,263  
Purchases: + 33,826  
Merchandise Available for Sale: \$ 88,089  
Merchandise Inventory, July 31: - 47,623  
Cost of Merchandise Sold: \$ 40,466

2-2. Merchandise Inventory, December 1: \$ 34,729  
Purchases: + 12,675  
(a) Merchandise Available for Sale: \$ 47,404  
Merchandise Inventory, December 31: - 18,627  
(b) Cost of Merchandise Sold: \$ 28,777

2-3. Merchandise Inventory, January 1: \$ 28,549  
Purchases: + 83,476  
Merchandise Available for Sale: \$ 112,025  
Merchandise Inventory, December 31: - 34,682  
Cost of Merchandise Sold: \$ 77,343

Unit 12. Section 55.  
Exercises 2-4.

326

Exercise 2  
(continued).

2-4. Merchandise Inventory, July 1: \$ 62,434  
Purchases: + 184,725  
Merchandise Inventory's balance: \$ 247,159  
Merchandise Inventory, June 30: = 43,968  
Cost of Merchandise Sold: \$ 203,191

3-1.	Sales	Returns and Allowances	Net Sales	Cost of Merchandise Sold	Gross Profit
a.	\$ 18,570	\$ 2,225	\$ 16,345	\$ 11,371	\$ 5,174
b.	28,619	2,728	25,891	17,686	8,205
c.	34,513	1,877	32,796	19,678	13,118
d.	24,144	1,509	22,555	14,758	5,777

3-5 Sales: \$ 32,120  
Returns and Allowances: - 1,395  
(a) Net Sales: \$ 30,725

Merchandise Inventory, March 1: \$ 50,540  
Purchases: + 10,600  
Merchandise Inventory's balance: \$ 61,140  
Merchandise Inventory, March 31: - 42,090  
(b) Cost of Merchandise Sold: \$ 19,050

Net Sales \$ 30,725  
Cost of Merchandise Sold: - 19,050  
(c) Gross Profit: \$ 11,675



Section 55,  
Exercises 3-4.

Unit 12

327

3-3. Merchandise Inventory, July 1: \$ 6,400  
Purchases: + 9,750  
Merchandise Available for Sale: \$ 16,150  
Merchandise Inventory, September 30: - 6,900  
Cost of Merchandise Sold: \$ 9,250

Net Sales: \$ 17,812  
Cost of Merchandise Sold: - 9,250  
Gross Profit: \$ 8,562

4-1.	Net Sales	Cost of Merchandise Sold	Gross Profit	Operating Expenses	Net Income
a.	\$ 4,562	\$ 3,122	\$ 1,440	\$ 973	\$ 467
b.	17,433	10,659	6,774	5,978	796
c.	26,705	17,359	9,346	7,633	1,713
d.	42,861	31,999	10,862	8,112	2,750

4-2. Net Sales: \$ 9,000  
Cost of Merchandise Sold: - 5,800  
Gross Profit: \$ 3,200  
Operating Expenses: - 2,300  
Net Income: \$ 900

4-3. Merchandise Inventory, January 1: \$ 27,000  
Purchases: + 62,000  
Merchandise Available for Sale: \$ 89,000  
Merchandise Inventory, December 31: - 29,000  
Cost of Merchandise Sold: \$ 60,000  
Net Sales: \$ 130,000  
Cost of Merchandise Sold: - 60,000  
Gross Profit: \$ 70,000  
Operating Expenses: - 45,000  
Net Income: \$ 25,000

Unit 12.

Section 55.

Exercises 4-5.

328

Exercise 4  
(continued)

4-4. Merchandise Inventory, July 1:	\$ 25,750
Purchases:	+ 60,000
Merchandise Available for Sale:	\$ 85,750
Merchandise Inventory, Goods 31:	- 20,400
Cost of Merchandise Sold:	\$ 65,350
Gross Sales:	\$ 98,500
Sales Returns and Allowances:	- 2,600
Net Sales:	\$ 95,900
Cost of Merchandise Sold:	- 65,350
Gross Profit:	\$ 30,550
Operating Expenses:	- 2,000
Net Income:	\$ 28,550

5-1. Net Sales:	\$ 5,000	100%
Cost of Merchandise Sold:	- 3,000	- 60%
Gross Profit on Sales:	\$ 2,000	40%
Operating Expenses:	- 1,250	- 25%
Net Income:	\$ 750	15%

5-2. Net Sales:	\$ 4,000	100%
Cost of Merchandise Sold:	- 2,600	- 65%
Gross Profit on Sales:	\$ 1,400	35%
Operating Expenses:	- 1,200	- 30%
Net Income:	\$ 200	5%

5-3. Net Sales:	\$ 8,000	100%
Cost of Merchandise Sold:	- 5,000	- 62½%
Gross Profit on Sales:	\$ 3,000	37½%
Operating Expenses:	- 2,000	- 25%
Net Income:	\$ 1,000	12½%



Section 55.  
Exercise 6

Unit 12.

329

6-1. Net Sales:	\$ 42,000	100%
(a) Cost of Merchandise Sold:	<u>-28,000</u>	<u>- 66<math>\frac{2}{3}</math>%</u>
(b) Gross Profit on Sales:	\$ 14,000	33 $\frac{1}{3}$ %

6-2. Net Sales:	\$ 60,000	100%
Cost of Merchandise Sold:	<u>-36,000</u>	<u>- 60%</u>
Gross Profit on Sales:	\$ 24,000	40%
(a) Operating Expenses:	<u>- 19,200</u>	<u>- 32%</u>
(b) Net Income:	\$ 4,800	8%

6-3. Net Sales:	\$ 200,000	100%
Cost of Merchandise Sold:	<u>-128,000</u>	<u>- 64% (b)</u>
(a) Gross Profit on Sales:	\$ 72,000 (a)	36% (b)
Operating Expenses:	<u>- 52,000</u>	<u>- 26% (b)</u>
(a) Net Income:	\$ 20,000 (a)	10% (b)

6-4. Net Sales:	\$ 68,000	100% (b)
Cost of Merchandise Sold:	<u>- 35,360</u>	<u>- 52% (b)</u>
Gross Profit on Sales:	\$ 32,640 (a)	48% (b)
Operating Expenses:	<u>- 25,840</u>	<u>- 38% (b)</u>
Net Income:	\$ 6,800 (a)	10% (b)

- cost of merchandise sold: (a) Amount of the merchandise sold expressed in selling prices.  
gross profit: (d) Net sales less cost of merchandise sold.  
income statement: (ii) Shows sales, cost of merchandise sold, gross profit, operating expenses, and net income or loss.  
net income: (h) Gross income less operating expenses.

## Unit 12.

## Section 55.

## Review Assignment 55.

## Exercises 1-5.

330

Review Assign  
 Unit 55 (continued)  
 Exercise 1  
 (continued)

net loss: (j) Operating expenses less gross profit.

net sales: (c) Sales less sales returns and

discounts.

operating expenses: (g) Overhead.

purchases: (e) Merchandise sold, expressed at cost value.

sales: (f) Total merchandise bought during a period.

sales returns and allowances: (b) Lessen the revenue from sales.

$$2. a. 387 \times \frac{1}{3} = \frac{387}{3} \times \frac{4}{3} = \frac{520}{3} = 506\frac{2}{3}$$

b. \$38.34 is 42% greater than \$27.25.

$$c. \$842.40 \times 12\% (\$101.09) \text{ for 15 days} \\ = \$21.06.$$

$$d. 2.5 \text{ mills} = 0.0125.$$

3. Net Sales:	\$ 160,000	100%
Less: Merchandise sold:	107,525	= 67%
Gross Profit on Sales:	\$ 52,475	33%
Operating Expenses:	36,475	= 23%
Net Income:	\$ 16,000	10%

$$4. \$3,850 - \$170 = \$3,680 \\ 5\% \text{ of } \$3,680 = \$184 \\ \$150 + \$184 = \$334$$

$$5. \$23,300 - 20\% = \$18,640.$$

Sections 55-56.

Unit 12.

Review Assignment 55.- Sections 56.

Exercises 6-13 (for Review Assignment 56),  
and Exercise 1 (for Section 56).

331

6.  $12 \times \$20 = \$240;$   
 $\$240 + \$40 = \$280;$   
 $\$280 - \$250 = \$30.$

7.  $\$100 \times 3\% = \$3.00;$   
 $\$3.00 \div \$75.00 = 4\%.$

8.  $7\frac{3}{4}\%$  of  $\$4,245,000 = \$328,987.50.$

9.  $40 \text{ mi.} \div 60 \text{ min.} = 0.67;$   
 $0.67 \times 18 \text{ mi.} = 12 \text{ min.}$

10. June 1 to August 10; 70 days.  
 $\$900 \times 9\% (\$81) \text{ for 70 days} = \$15.75.$

11.  $\$9,420,000 - \$702,955 = \$8,717,045;$   
 $\$304,960 \div \$8,717,045 = 0.03498;$   
 $0.03498 \times \$1,000 = \$34.98.$

12.  $0.03 \times 595 = 17.85.$

13. Total sale,  $\$58.30$

(a) Retail price,  $\$55.00$

(b) Sales tax of 6%,  $\$3.30.$

Section 56.

1-1.	Claimant	No. of With- holding Allowances	Total Earnings	Income Tax Withholding
a.	W. F. Barba	3	\$270.25	\$18.70
b.	R. L. Colby	1	213.78	23.90
c.	E. L. Fell	3	230.00	22.30
d.	C. K. Mann	1	234.90	27.50



Unit 12. Section 56.  
Exercise 1.

332

Exercise 1  
(continued).

	Claimant	No. of With- holding Allowances	Total Earnings	Income Tax Withholding
e.	H. B. Park	2	\$236.87	\$24.90
f.	R. E. Pugh	4	237.50	19.70
g.	A. B. Samp	2	241.68	26.70
h.	C. F. Turk	5	243.28	18.90

1-2.	Claimant	Total Earnings	FICA Tax
a.	O. E. Akim	\$203.15	\$12.45
b.	H. L. Allen	202.85	12.43
c.	E. J. Deff	214.15	13.13
d.	A. C. Hanna	224.32	13.75
e.	H. J. Lewis	224.60	13.77
f.	M. B. Sater	233.50	14.32
g.	L. J. Pica	234.01	14.34
h.	C. M. Unger	224.63	14.38

1-3.	Rate		Hours	Total	Deductions				Net Pay	
	Hourly	Day			FICA Tax	Inc. Tax	Inc. Tax	Total		
H. B. Park	6	41	0	\$5.00	\$200.00	\$4.00	\$12.00	\$4.00	\$25.36	\$174.64
R. E. Pugh	0	40	3	5.40	240.30	32.80	14.73	2.00	49.53	190.77
A. B. Samp	5	39	2	5.25	220.50	15.30	13.52	3.50	32.32	188.18
Total				\$15.65	\$660.80	\$57.20	\$40.51	\$1.50	\$107.51	\$553.54

$$\begin{array}{r}
 1-4. \quad a. \quad \$660.80 \\
 \times \quad .0613 \\
 \hline
 198240 \\
 66080 \\
 396480 \\
 \hline
 \$40507040 \\
 = \$40.51
 \end{array}$$

$$\begin{array}{r}
 b. \quad \$26,235 \\
 \times \quad .0613 \\
 \hline
 78705 \\
 26235 \\
 157410 \\
 \hline
 \$16082055 \\
 = \$16.08
 \end{array}$$

Section 56.  
Exercises 2-3.

Unit 12

333

2-1. Name	Time Record					Total Hours		Hour Rate	Earnings		
	M	T	W	T	F	Reg.	O.T.		Reg.	O.T.	Total
H. J. Alby	8	8	8	8	7	39	0	\$6.50	\$253.50	—	\$253.50
C. H. Barth	8	9	9	8	8	40	2	6.21	248.40	\$18.63	267.03
F. A. DeVoe	7	0	9	8	8	31	1	6.30	195.30	9.45	204.75
R. J. Mora	8	9	9	8	9	40	3	6.10	244.00	27.45	271.45
Totals									\$941.20	\$55.53	\$996.73

2-2. Name	No. of Allowances	Total Hours		Hour Rate	Total Earnings	Deductions				Net Pay
		Reg.	O.T.			FICA Tax	Fed. Inc. Tax	State Inc. Tax	Total	
R. N. Grey	4	40	2	\$5.80	\$249.40	\$26.70	\$15.29	\$7.50	\$49.49	\$199.91
J. M. Ward	1	40	0	6.10	244.00	32.80	14.96	7.00	54.76	189.24
R. L. Kent	3	37	3	6.00	249.00	24.10	15.26	7.50	46.86	202.14
Totals					\$742.40	\$83.60	\$45.51	\$22.00	\$151.11	\$591.29

3-1. (a) Change Sheet: November 8, 1980

Name	Net Wages	\$100	\$50	\$20	\$10	\$5	\$1	50¢	25¢	10¢	5¢	1¢
R. Inez	\$224.16	2		1			4			1	1	1
B. Dole	118.71	1			1	1	3	1		2		1
M. Bent	211.15	2			1		1			1	1	
L. Hall	193.75	1	1	2			3	1	1			
Totals	\$747.77	6	1	3	2	1	11	2	1	4	2	2

(b) Change Sheet: November 23, 1980

Name	Net Wages	\$100	\$50	\$20	\$10	\$5	\$1	50¢	25¢	10¢	5¢	1¢
N. Luft	\$228.32	2		1		1	3		1		1	2
L. Metz	212.65	2			1		2	1		1	1	
P. Rath	241.95	2		2			1	1	1	2		
L. Tate	292.08	2	1	2			2				1	3
Totals	\$975.00	8	1	5	1	1	8	2	2	3	3	5

Note: See page 334 for change memos that relate to this exercise.



Unit 12. Section 56,  
Exercises 3-4.

334

Exercise 3  
(continued).

3-1 (a) Change Memorandum		
Denomination	No.	Amount
\$100.00	6	\$600.00
50.00	1	50.00
20.00	3	60.00
10.00	2	20.00
5.00	1	5.00
1.00	11	11.00
.50	2	1.00
.25	1	.25
.10	4	.40
.05	2	.10
.01	2	.02
Total		\$747.71

(b) Change Memorandum		
Denomination	No.	Amount
\$100.00	8	\$800.00
50.00	1	50.00
20.00	5	100.00
10.00	1	10.00
5.00	1	5.00
1.00	8	8.00
.50	2	1.00
.25	2	.50
.10	3	.30
.05	3	.15
.01	5	.05
Total		\$975.00

4. Name: Karen Lee

Address: 462 Walnut Ave.

City: Reno NV 89577

Social Security No.: 215-12-3177

No. of Dependents: 3

Week Ended	Gross Pay	Deductions				Net Pay	Total & Earnings Accumulate
		Withholding Tax	FICA Tax	Health Insurance	Total		
July 31st	\$9,126.00	\$1,435.00	\$559.40	\$195.00	\$2,189.40	\$6,936.60	\$9,126.00
10/1	234.00	22.50	14.54	5.00	41.64	192.36	9,360.00
10/14	234.00	22.30	14.54	5.00	41.64	192.36	9,594.00
10/21	234.00	22.30	14.34	5.00	41.64	192.36	9,822.00
10/28	234.00	22.30	14.34	5.00	41.64	192.36	10,062.00

Note: See page 333 for change sheets that relate to  
Exercise 3.

1. Change memorandum: (d) Shows only totals of each kind of money needed for a payroll.

change sheet: (c) Shows the bills and coins needed to pay each worker, and the totals of each kind of money.

individual earnings record: (a) Shows total earnings, deductions, net pay, and accumulated earnings for one worker.

payroll register: (b) Shows earnings, deductions, and net pay of all workers for one period.

2. a.  $30 \times 1\frac{3}{8} = \frac{30}{1} \times \frac{11}{8} = \frac{165}{4} = 41\frac{1}{4}$

b.  $18 \div 1\frac{2}{3} = \frac{18}{1} \times \frac{3}{5} = \frac{54}{5} = 10\frac{4}{5}$

c.  $\$650 \times 9\frac{1}{2}\% (\$61.75) \text{ for } 90 \text{ days}$   
 $= \$15.44$

d.  $\$21 \div \$1,000 = 0.021$

e.  $4300 \text{ m} = 4.3 \text{ km}$

3.  $4 \times \$0.75 = \$3.00$ ;

$40 \times \$3.00 = \$120.00$ ;

$\$120.00 \div \$1,600.00 = 7.5\%$

4.  $\$6,700 \div \$100 = \$67$ ;

$\$6.1213 \times \$67 = \$410.13$

5.  $90\% \text{ of } \$42,000 = \$37,800$ ;

$\$37,800 \div 100 = \$378$ ;

$\$378.00 \times \$0.37 = \$139.86$

## Unit 12.

## Sections 56-57.

Part 56 Assignment 56-Part 57a.

Exercises 6-7 (2-Part Assignment 56),  
and Exercise 1 (for Part 57a).

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Part 56 Assignment 56 (continued)

$$6. \$5,000 - \$950 = \$4,050;$$

$$\$4,050 \div 4\frac{1}{2} = \$900;$$

$$\$900 \div \$4,050 = 22\%.$$

$$7. 0.04 \times \$630.50 = \$25.22.$$

## Section 57.

Part 57.

1. a. The least amount of sales for Saturday was \$1,000 with a sale on Tuesday.
- c. The days in which the amount of sales exceeded \$1,000 are Thursday and Saturday.
- d. The days in which the amount of sales was \$1,000 or more were Monday and Wednesday.

2. a. Thomas expects approximate sales for the first week were \$450.

- b. He made the same total sales in the second week as the first.

- c. The first week sales were \$450 and the second week sales were \$450 (25% increase) and the first week (\$450).

- d. \$600 (third week) - \$400 (second week) = \$200;

50% increase.

- e. \$600 (third week) - \$250 (for 2 weeks) = \$350;

25% decrease.

- f. \$530 + \$400 + \$600 + \$450 + \$550 = \$2,530.

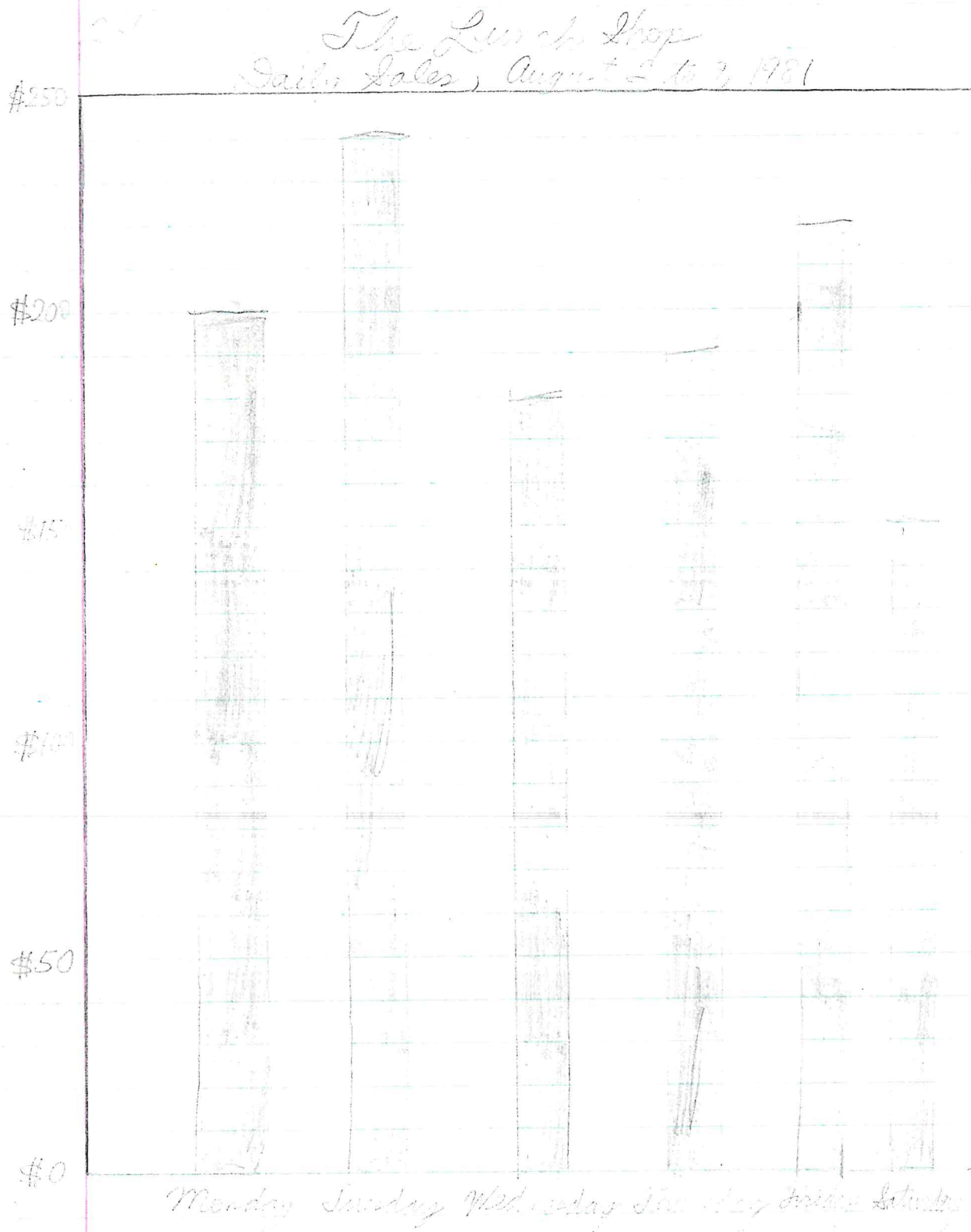


3. a. The approximate sales were: March, \$19,000; April, \$22,000; May, \$22,000; June, \$29,000; July, \$31,000; August, \$29,000; September, \$28,000; October, \$30,000; November, \$28,000; and December, \$33,000.
- b. The highest amount of sales came in December.
- c. The lowest amount of sales came in February (\$17,000).
- d. The months in which the sales exceeded \$26,000 were June, July, August, September, October, November, and December.
- e. The months in which the sales fell below \$20,000 were February and March.

4. a. The sales each month, for January, February, and March, were \$40,000.
- b. The month in which the operating expenses were the lowest was February (\$10,000).
- c. The highest operating expenses for a month was \$14,000 in March.
- d. The month in which the net income was the highest was February with \$6,000.
- e. The lowest net income was \$2,000 in March.

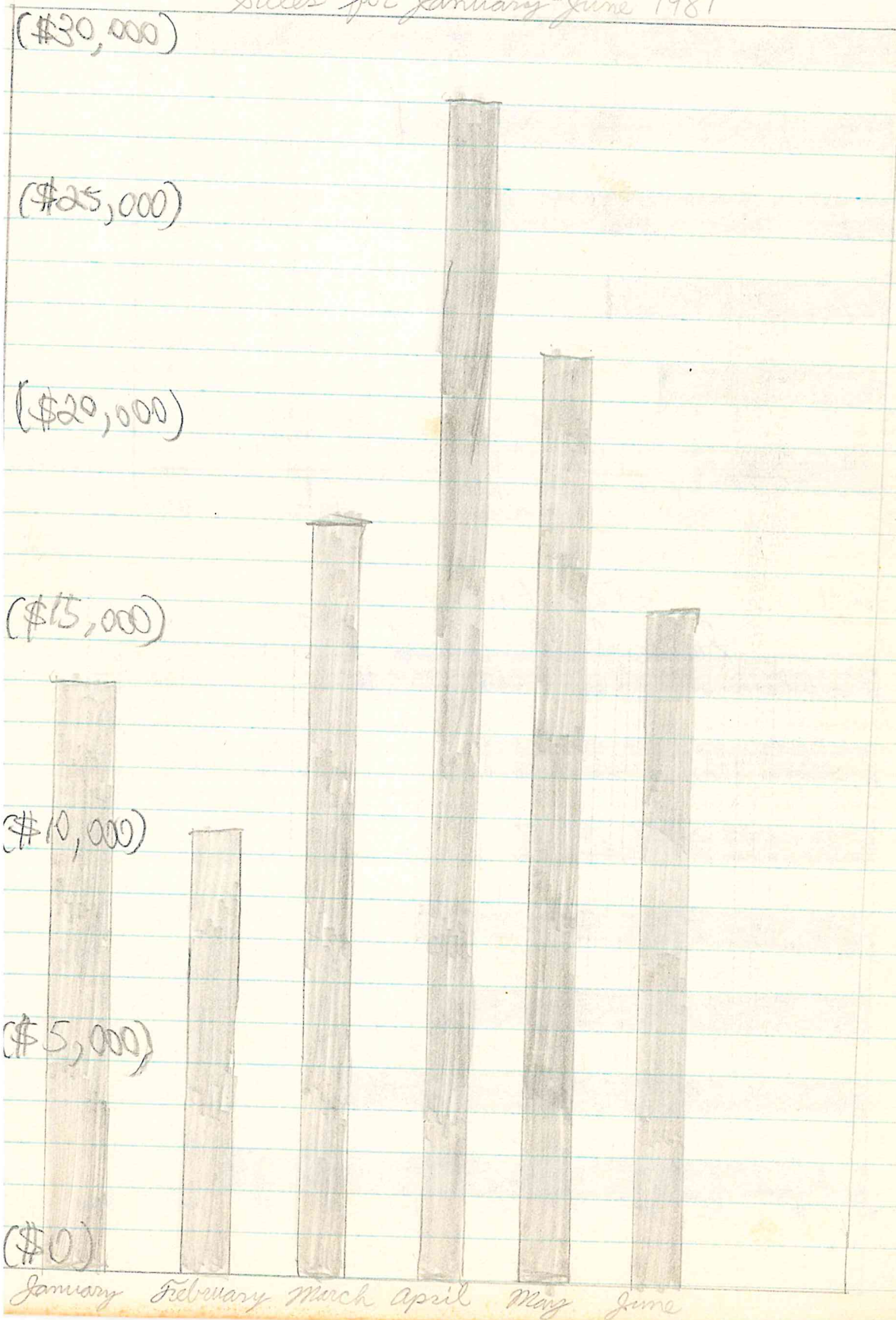
Unit 12. Section 57.  
Part 57a.  
Exercise 2.

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2-2.

The Baxter Store  
Sales for January-June 1981





Unit 12. Section 57.  
Part 57a.  
Exercise 2.

340

Exercise 2  
continued.

2-3.

Lucca Appliances Outlet

Co. No. 8-14, 1981

Vand Radios

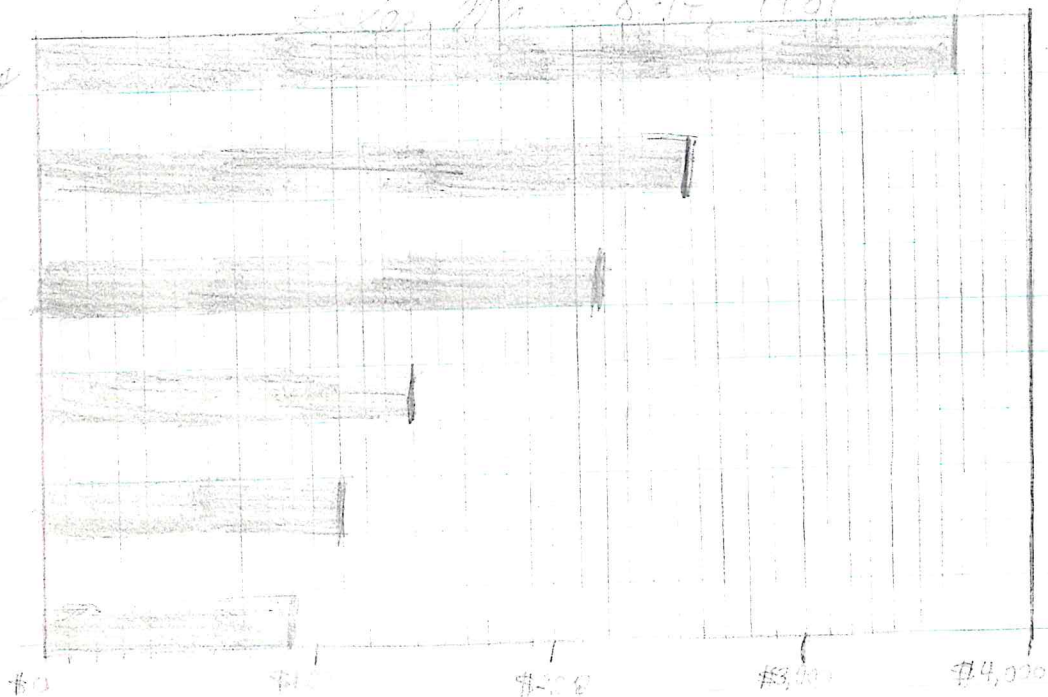
Wahlers

Refrigerators

Freezers

Stoves

Washers



2-4.

The Exit Shop  
Sales for July 2-9, 1981

Sunday

Monday

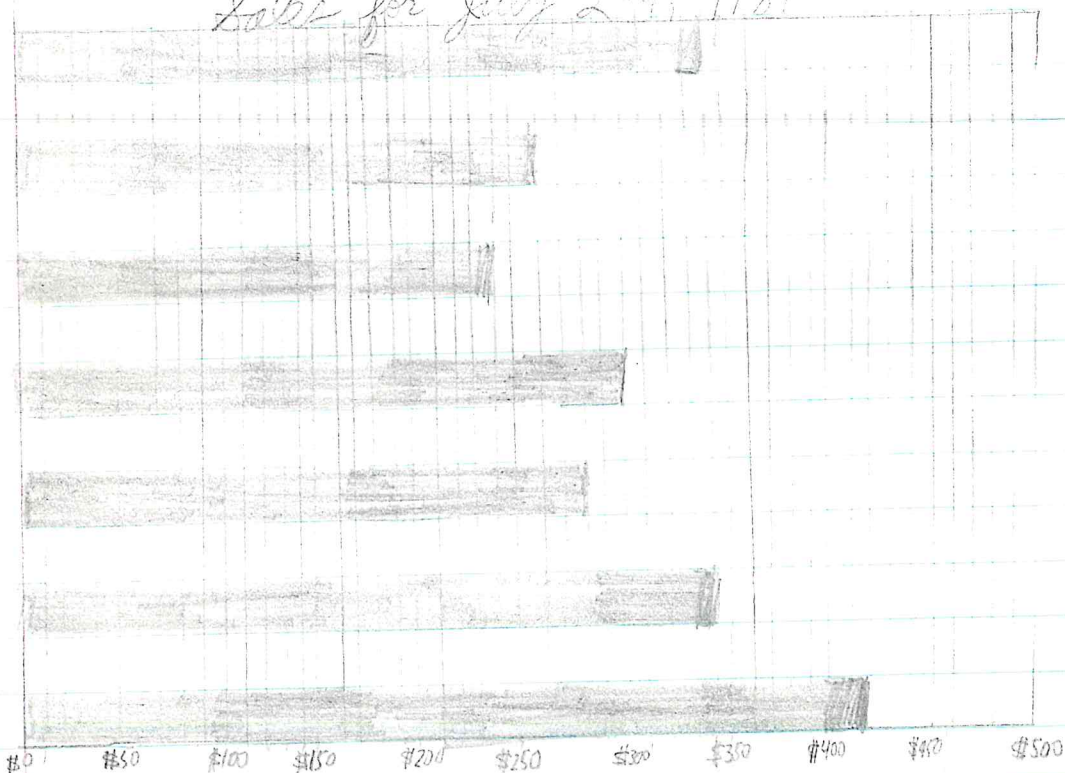
Tuesday

Wednesday

Thursday

Friday

Saturday

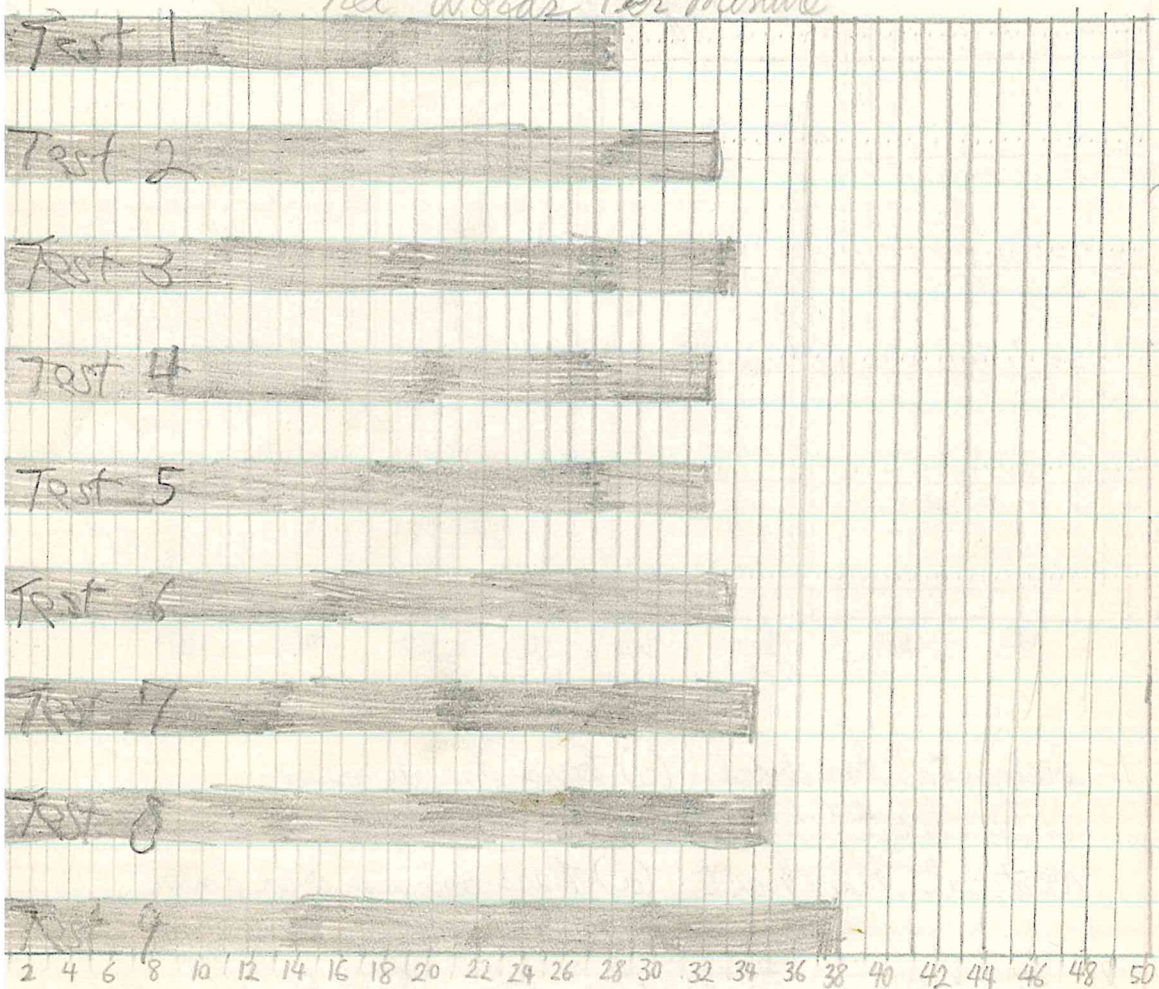


Section 57.  
Part 57a.  
Exercise 2.

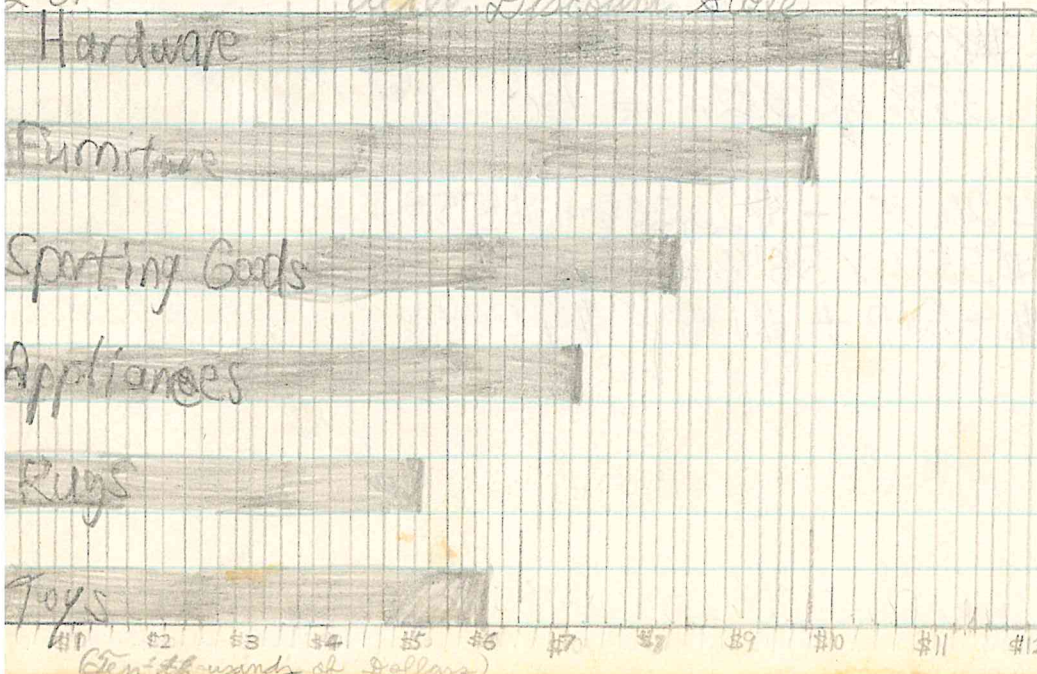
Unit 12.

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2-5. Bob Wood's Typewriting Speed  
Net Words Per Minute



2-6. Altee Discount Store





Unit 12.

Section 57.

Part 57a - Review Assignment 57a.

Exercise 2 (for Part 57a),

and Exercise 3 (for Review Assignment 57a).

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Exercise 2

2.?

Mail Sundry Shop

Postage Sales List

Date

Page

Mail

Op

Op

Op

Assignment 57a.

1. Horizontal bar chart: (c) Bars are across.  
Line chart: (b) Lines connect dots.  
Vertical bar chart: (a) Bars are up and down.

2.  $\$24.00$  is  $\frac{2}{3}$  greater than  $\$14.40$ .

is  $\$225.50$  is 18% less than  $\$275.00$ .

is  $\$825 \times 6\%$  ( $\$49.50$ ) for 36 days =  $\$4.95$ .

is 35% of  $372m^2 = 130.2m^2$ .

3.  $\$22,150 - \$20,200 = \$550$ ;

$\$550 \times 36\% = \$198$ ;

$\$4,510 + \$198 = \$4,708$ .



Section 57.  
Review Assignment 57a.  
Exercises 4-7.

Unit 12

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Name	Time Record					Total Hours		Hour Rate	Earnings		
	M	T	W	T	F	Reg.	O.T.		Reg.	O.T.	Total
B. J. Dunn	8	8	8½	7	8	39	½	\$4.80	\$187.20	\$3.60	\$190.80
L. H. Knox	7	9	8	8	9	39	2	6.05	235.95	18.15	254.10
F. L. Oster	8	6½	8	8	8½	38½	½	6.94	267.19	5.21	272.40
Totals									\$690.34	\$26.96	\$717.30

5.  $\$618,815 \div \$14,650,000 = 0.04224$ ;  
 $0.04224 \times \$1,000 = \$42.24$ .

6. Change Sheet for August 10, 1981

Name	Net Wages	\$100	\$50	\$20	\$10	\$5	\$1	50¢	25¢	10¢	5¢	1¢
B. E. Ewing	\$258.34	2	1			1	3		1		1	4
A. J. Heinz	213.37	2			1	3			1	1		2
L. J. Minors	187.57	1	1	1	1	2	1				1	2
E. F. Lefaro	194.92	1	1	2		4	1	1	1	1	1	2
Totals	\$854.20	6	3	3	2	2	12	2	3	2	3	10

Change Memorandum

Denomination	No.	Amount
\$ 100.00	6	\$ 600.00
50.00	3	150.00
20.00	3	60.00
10.00	2	20.00
5.00	2	10.00
1.00	12	12.00
.50	2	1.00
.25	3	.75
.10	2	.20
.05	3	.15
.01	10	.10
Total		\$ 854.20

7.  $3.2 \text{ m}$   
 $\times 4.5 \text{ m}$   
 $\hline 160$   
 $128$   
 $\hline 1440 \text{ m}^2$   
 $3 \frac{13}{10}$   
 $14.40 \text{ m}^2$   
 $= 2.75 \text{ m}^2$   
 $11.65 \text{ m}^2$

Unit 12. Section 57.  
Part 57b.  
Exercise 3.

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3-1. Wheeler & Co. Inc.  
for Last year

\$1.00

Net Income

12%

\$0.12

\$0.88

Operating  
Expenses

28%

\$0.28

\$0.60

\$0.50

Cost of

Merchandise Sold

60%

\$0.60

\$0.30

\$0.20

\$0.10

\$0.00

Section 57.

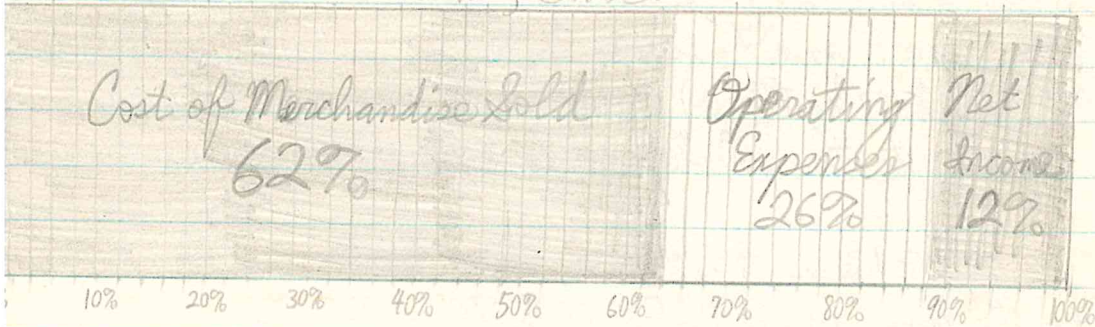
Unit 12.

Part 57b. - Exercise 3.1f

Exercise 3.1f

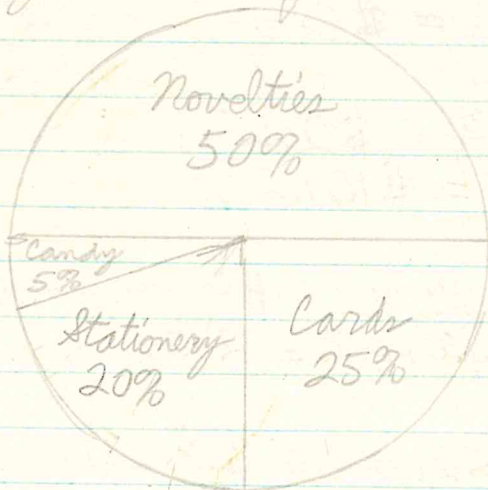
345

3-2. Marko's, Inc.



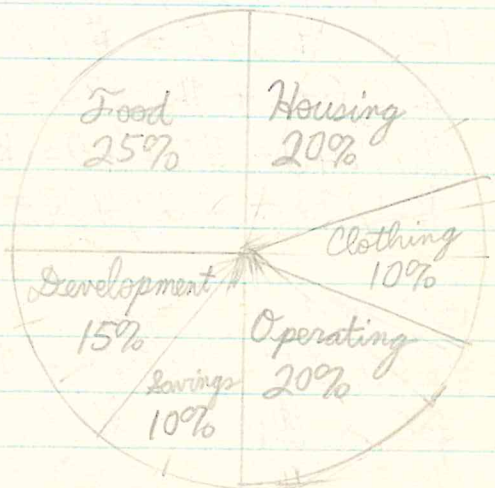
3-3. a. Novelties:  $50\%$  of  $360^\circ = 180^\circ$   
 Stationery:  $20\%$  of  $360^\circ = 72^\circ$   
 Cards:  $25\%$  of  $360^\circ = 90^\circ$   
 Candy:  $5\%$  of  $360^\circ = 18^\circ$

b.



3-4

Food:  $\$250 \div \$1,000 = 25\%$   
 Housing:  $\$200 \div \$1,000 = 20\%$   
 Clothing:  $\$100 \div \$1,000 = 10\%$   
 Operating:  $\$200 \div \$1,000 = 20\%$   
 Development:  $\$150 \div \$1,000 = 15\%$   
 Savings:  $\$100 \div \$1,000 = 10\%$





## Unit 12.

## Section 57.

Review Assignment 57.

Exercises 1-7.

346

Review Assignment 57.

1. circle chart: (a) 2 circles showing how parts relate to the whole and to each other.  
 rectangular chart: (b) 2 rectangles showing how parts relate to the whole and to each other.

$$2. a. 25 \div 1\frac{3}{8} = 25 \times \frac{8}{11} = \frac{200}{11} = 18\frac{2}{11}$$

$$b. \frac{1}{3} \text{ less than } \$255 = \$170.$$

$$c. \$695 \times 7 = (\$48.65) \text{ for } 1 \text{ min} = \$12.16.$$

$$d. 13.2 \text{ min} \times \$1.10 = \$14.52.$$

$$e. \text{ May 10 to May 15: } 15 - 10 = 5 \text{ days}$$

$$3. \$4,400 - \$660 = \$3,740$$

$$\$3,740 \div 5\frac{1}{2} = \$680.$$

$$4. \$50 \times 4\frac{1}{2}\% = \$2.25;$$

$$\$2.25 \times 45 = \$101.25.$$

$$5. \$20,000 + \$28,000 + \$32,000 = \$80,000$$

$$\$80,000 \div \$22,222 = 3.5\%$$

$$6. \$50,400 - \$21,000 = \$29,400;$$

$$9\% \text{ of } \$29,400 = \$2,646;$$

$$12 \times \$645 = \$7,740;$$

$$\$2,646 + \$2,114 = \$4,760;$$

$$\$7,740 - \$4,760 = \$2,980;$$

$$\$2,980 \div \$29,400 = 10.1\%.$$

$$7. 50 \times \$13\frac{1}{4} = \$662.25;$$

$$\$662.25 - \$17.65 = \$644.60;$$

$$50 \times \$10\frac{1}{8} = \$506.25;$$

$$\$506.25 - \$16.43 = \$489.82.$$

$$\$644.60 - \$489.82 = \$154.78.$$

## Section 57.

Review Assignment 57b - General Review.

Exercise 8 (for Review Assignment 57b),  
and Exercises 1-5 (for General Review).

8. a.  $80\%$  of  $\$40,000 = \$32,000$ ;

$\$32,000 \div 100 = \$320$ ;

$\$320.00 \times \$0.415 = \$132.80$ .

b.  $\$25,000 \div \$32,000 = 0.78125$ ;

$0.78125 \times \$7,200 = \$5,625$ .

$$\begin{array}{r}
 \begin{array}{r}
 \overset{321}{21} \\
 164.2 \\
 \times 6.4 \\
 \hline
 6568 \\
 9852 \\
 \hline
 1050.88
 \end{array}
 \quad
 \begin{array}{r}
 \overset{924}{6.3} \overline{)582.12} \\
 \underline{567} \phantom{00} \\
 151 \phantom{00} \\
 \underline{126} \phantom{00} \\
 252 \phantom{00} \\
 \underline{252} \phantom{00} \\
 0
 \end{array}
 \quad
 \begin{array}{r}
 c. \quad 15\frac{3}{4} = 15\frac{30}{40} \\
 8\frac{1}{5} = 8\frac{8}{40} \\
 22\frac{1}{2} = 22\frac{20}{40} \\
 + 3\frac{7}{8} = + 3\frac{35}{40} \\
 \hline
 38\frac{93}{40} \\
 = 40\frac{13}{40}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 d. \quad 25\frac{1}{8} = 28\frac{1}{6} \\
 = 8\frac{2}{3} = 8\frac{4}{6} \\
 \hline
 16\frac{3}{6} = 16\frac{1}{2}
 \end{array}
 \quad
 \begin{array}{r}
 e. \quad 54\frac{1}{5} \times 5\frac{1}{3} = \frac{271}{5} \times \frac{16}{3} = \frac{4,336}{15} = 289\frac{1}{15} \\
 f. \quad 22\frac{1}{2} \div \frac{3}{4} = \frac{45}{2} \times \frac{4}{3} = 30 \\
 g. \quad \frac{3}{7} = 43.
 \end{array}$$

2.  $\$116 \times \frac{1}{2}\% = \$1.58$ ;

$\$140 \times \frac{1}{2}\% = \$0.70 (\$0.60)$ .

Total:  $\$1.58 + \$0.60 = \$2.18$ .

3.  $195 \text{ mi.} \div 45 \text{ mph.} = 4 \text{ hr. } 20 \text{ min.}$

4.  $15\%$  of  $\$7,862.50 = \$1,179.38$ .

5. March 10 to May 29: 80 days.

$\$900 \times 10\% (\$90.00) \text{ for } 80 \text{ days} = \$20.00$ .

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General Review  
(continued).

6.  $10 \times 5 = 50;$

$\$6.00 \times 40 = \$240.00;$

$\$6.00 \times 1.5 = \$9.00;$

$\$9.00 \times 10 = \$90.00;$

$\$240.00 + \$90.00 = \$330.00;$

$\$330.00 \times 6.13\% = \$20.23;$

$\$20.23 + \$10.00 + \$70.40 = \$100.63;$

$\$330.00 - \$100.63 = \$229.37.$

7.  $9 \times \$28.82 = \$259.38;$

$\$259.38 - \$250.00 = \$9.38.$

8.  $\$800 \div 10 = \$80;$

$4 \times \$0.90 = \$3.60;$

$\$3.60 \div 10 = \$0.36;$

$\$0.36 \div \$800.00 = 4.5\%.$

9.  $\$8,450,000 \times 7\frac{1}{4}\% = \$612,625.$

10.  $\$2,772 - \$52 = \$2,720;$

$\$2,720 \div \$32 = 85.$

11.  $\$5,400 - \$1,800 = \$3,600;$

$\$3,600 + \$1,440 = \$5,040;$

$\$5,040 \div \$36 = \$140.$

12.  $0.325 = \frac{325}{1000} = \frac{13}{40}.$



Section 57.  
General Review.  
Exercises 13-16.

Unit 1-

349

13.

Jerry Radley  
Reconciliation Statement  
November 30, 1980

Checkbook balance: \$1,405.66	Bank statement balance: \$1,342.16
Add:	Less outstanding checks:
Check not recorded 32.10	#81 \$26.40
	#87 - 17.20 43.60
	Sub-total: \$1,298.56
	Add: Deposit not recorded 75.00
Correct checkbook balance: \$1,373.56	Available bank balance: \$1,373.56

14.  $\$1,200 - \$800 = \$400$ ;  
 $\$400 \div 1\% = \$40,000$ .

15.  $\$46,500 + 7\% (\$3,255)$ ;  
 $\$46,500 + \$3,255 = \$49,755$ .

16. a. Total sale, \$30.16.  
Retail price, \$29.00  
b. Sales tax (4%), \$1.16.

Unit 13.

Section 58.  
Part 58a,  
Exercise 1.

350

Unit 13, Section 58.

1-1.	Date on arrival	Days	Arrival Date
a.	January 6	30 days	February 5
b.	April 14	60 days	June 3
c.	March 22	10 days	April 1
d.	June 15	90 days	September 13
e.	August 10	45 days	September 24
f.	November 5	75 days	January 19

1-2.	Qty.	Description	Unit Price	Amount
	12 doz	Bars	\$1.50	\$18.00
	15 doz	Bars tomatoes	2.75	41.25*
	6 doz	Bars	3.95	23.70
	5 dozen	Bottle catsup	2.25	11.25
	25 doz	Cans meat	3.85	96.25
				<u>\$190.45</u>

\* Barb 1" = 1 \$41.35, which is incorrect amount.

1-3.	Qty.	Description	Unit Price	Amount
	10 boxes	Regular envelopes	\$2.75	\$27.50
	8 boxes	Legal envelopes	3.75	30.00
	15 boxes	File folders	3.00	45.00
	30 reams	Duplicate paper	1.75	52.50
	50 reams	Bond paper	3.25	162.50
	12 packages	Master units	4.80	57.60
	4 boxes	Stamp pads	7.20	28.80
	5 dozen	Desk blotters	3.50	17.50
	50 boxes	Staples	.75	37.50
	Total			<u>\$458.90</u>

# Section 58.

Part 58a - Review Assignment 58a.

Exercise 2 (for Part 58a),

and Exercise 1 (for Review Assignment 58a).

Unit 13.

351

2-1. Purchases	\$ 58,400
Returns and allowances	- 2,044
Net purchases	\$ 56,356

$$\$2,044 \div \$58,400 = 3.5\%$$

2-2. Items	Purchases	Returns	Net Purchases
(a) Tennis wear	\$ 5,326	\$ 409	\$ 5,735
Exercise wear	4,785	128	4,913
Swim wear	1,364	33	1,397
Golf wear	2,206	88	2,294
Ski wear	868	45	913
(b) Totals	\$14,549	\$ 703	\$15,252

2-3. Month	TV Sets	Stereos	Home TV	Total Purchases
October	\$ 5,296	\$ 5,272	\$13,492	\$ 24,060
November	6,452	4,432	16,324	27,208
December	9,388	8,244	22,448	40,080
(b) Totals	\$21,136	\$17,948	\$ 52,264	\$ 91,348

1. credit period: (b) Length of time given to pay an invoice.

net purchases: (d) Purchases less purchases returns and allowances.

on account: (e) Buy now and pay later.

purchase invoice: (a) A form showing details of merchandise bought.

terms of sale: (c) Tells when invoice must be paid, and discounts given for early payment.



nit 13:

Section 58.

Review Assignment 58a.

Exercises 2-4.

52

nit 58a

2.	Quantity	Description	Unit Price	Amount
	25 cases	Canned peas	\$4.65	\$116.25
	32 cases	Canned peas	5.15	164.80
	5 cases	Canned beans	6.05	30.25
	24 cases	Canned tomatoes	6.25	150.00
	Totals			\$461.30

\* Book listed \$152.00, which is incorrect amount

3. Annual Date for the (Time for)  
March 10 - May 15

Sunday

Monday

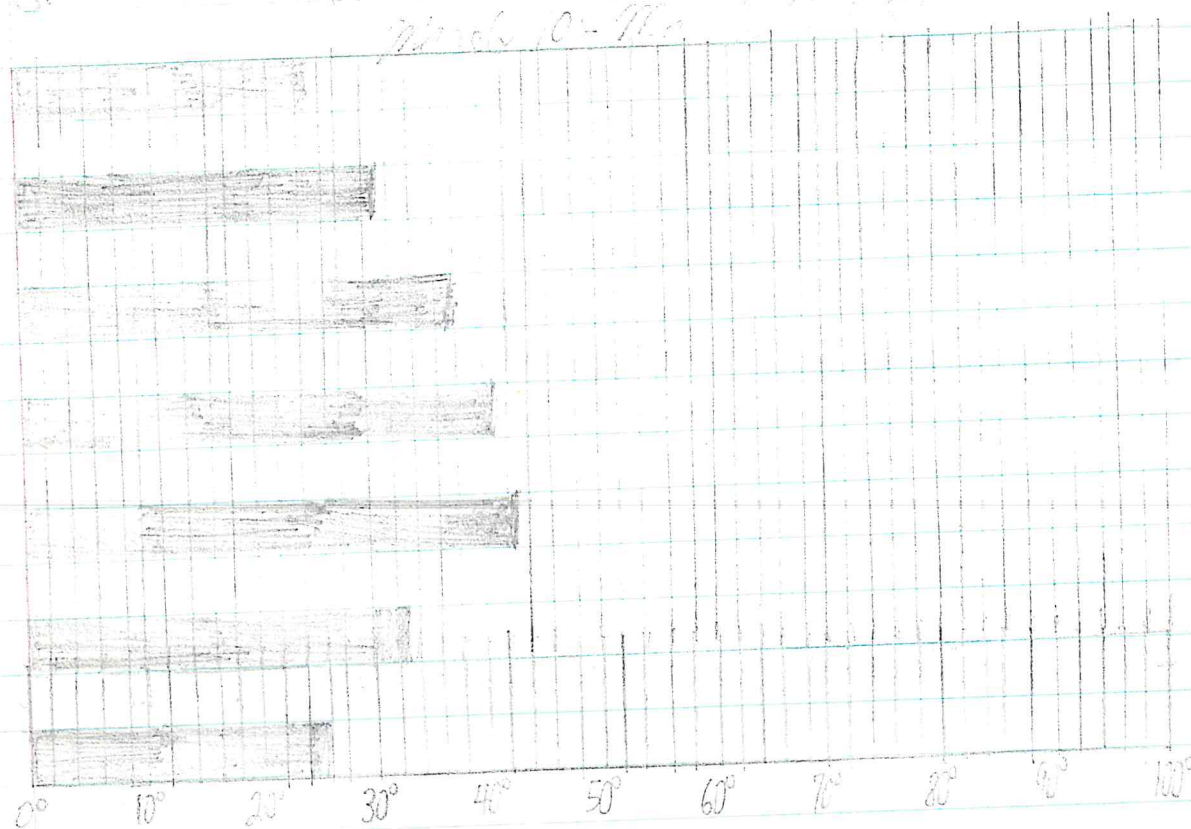
Tuesday

Wednesday

Thursday

Friday

Saturday



4.  $\$1,000 \times 6\% = \$60;$   
 $\$60 \div \$75 = 8\%.$

## Section 58.

Review Assignment 58a-Part 58b.

Exercises 5-6 (for Review Assignment 58a),  
and Exercise 3 (for Part 58b).

$$5. \quad \$200.75 \times 12 = \$2,409.00;$$

$$\$2,409.00 \times 20 = \$48,180.00;$$

$$\$48,180 - \$24,000 = \$24,180.$$

$$6. \quad a. \quad 0.03 \times \$550 = \$16.50.$$

$$b. \quad 4\% \times \$475 = \$19.$$

$$3-1. \quad a. \quad \$1.10 = \$1 + \frac{1}{10} \text{ of } \$1; 17 \times \$1 = \$17;$$

$$\frac{1}{10} \times \$17 = \$1.70; \$17.00 + \$1.70 = \$18.70.$$

$$b. \quad \$1.12\frac{1}{2} = \$1 + \frac{1}{8} \text{ of } \$1; 16 \times \$1 = \$16;$$

$$\frac{1}{8} \times \$16 = \$2.00; \$16.00 + \$2.00 = \$18.00.$$

$$c. \quad \$1.25 = \$1 + \frac{1}{4} \text{ of } \$1; 32 \times \$1 = \$32;$$

$$\frac{1}{4} \times \$32 = \$8.00; \$32.00 + \$8.00 = \$40.00.$$

$$d. \quad \$1.50 = \$1 + \frac{1}{2} \text{ of } \$1; 18 \times \$1 = \$18;$$

$$\frac{1}{2} \times \$18 = \$9.00; \$18.00 + \$9.00 = \$27.00.$$

$$e. \quad \$2.50 = \$2 + \frac{1}{2} \text{ of } \$1; 12 \times \$2 = \$24;$$

$$\frac{1}{2} \times \$12 = \$6.00; \$24.00 + \$6.00 = \$30.00.$$

$$f. \quad \$1.12\frac{1}{2} = \$1 + \frac{1}{8} \text{ of } \$1; 24 \times \$1 = \$24;$$

$$\frac{1}{8} \times \$24 = \$3.00; \$24.00 + \$3.00 = \$27.00.$$

$$g. \quad \$1.50 = \$1 + \frac{1}{2} \text{ of } \$1; 28 \times \$1 = \$28;$$

$$\frac{1}{2} \times \$28 = \$14.00; \$28.00 + \$14.00 = \$42.00.$$

$$h. \quad \$1.10 = \$1 + \frac{1}{10} \text{ of } \$1; 22 \times \$1 = \$22;$$

$$\frac{1}{10} \times \$22 = \$2.20; \$22.00 + \$2.20 = \$24.20.$$

$$i. \quad \$2.50 = \$2 + \frac{1}{2} \text{ of } \$1; 16 \times \$2 = \$32;$$

$$\frac{1}{2} \times \$16 = \$8.00; \$32.00 + \$8.00 = \$40.00.$$

$$1-2. \quad a. \quad \$2.50 = \$2 + \frac{1}{2} \text{ of } \$1; 14 \times \$2 = \$28;$$

$$\frac{1}{2} \times \$14 = \$7.00; \$28.00 + \$7.00 = \$35.00.$$

$$b. \quad \$1.12\frac{1}{2} = \$1 + \frac{1}{8} \text{ of } \$1; 56 \times \$1 = \$56;$$

$$\frac{1}{8} \times \$56 = \$7.00; \$56.00 + \$7.00 = \$63.00.$$

$$c. \quad \$1.25 = \$1 + \frac{1}{4} \text{ of } \$1; 36 \times \$1 = \$36;$$

$$\frac{1}{4} \times \$36 = \$9.00; \$36.00 + \$9.00 = \$45.00.$$

## Unit 13.

## Section 58.

Part 58b - Review Assignment 58b.

Exercise 3 (for Part 58b),

and Exercises 1-3 (for Review Assignment 58b).

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Part 58b.

$$d. \$1.12 = \$1 + \frac{1}{10} \text{ of } \$1.43 \times \$1 = \$43.$$

$$\frac{1}{10} \times \$43 = \$4.30; \$43.00 + \$4.30 = \$47.30.$$

$$e. \$1.125 = \$1 + \frac{1}{8} \text{ of } \$1.88 \times \$1 = \$88.$$

$$\frac{1}{8} \times \$88 = \$11.00; \$88.00 + \$11.00 = \$99.00.$$

$$f. \$1.12 = \$1 + \frac{1}{4} \text{ of } \$1.48 \times \$1 = \$48.$$

$$\frac{1}{4} \times \$48 = \$12.00; \$48.00 + \$12.00 = \$60.00.$$

$$g. \$1.12 = \$1 + \frac{1}{2} \text{ of } \$1.22 \times \$1 = \$22.$$

$$\frac{1}{2} \times \$22 = \$11.00; \$22.00 + \$11.00 = \$33.00.$$

$$h. \$1.12 = \$1 + \frac{1}{4} \text{ of } \$1.44 \times \$1 = \$44.$$

$$\frac{1}{4} \times \$44 = \$11.00; \$44.00 + \$11.00 = \$55.00.$$

$$i. \$1.12 = \$1 + \frac{1}{10} \text{ of } \$1.35 \times \$1 = \$35.$$

$$\frac{1}{10} \times \$35 = \$3.50; \$35.00 + \$3.50 = \$38.50.$$

Part 58b.

$$1. a. 65 \times 1\frac{2}{5} = 65 \times \frac{7}{5} = \frac{455}{5} = 91.$$

$$b. \$1,130 \times 12\% (\$135.60) \text{ for 30 days}$$

$$= \$11.30.$$

$$c. 15.3 \text{ miles} \div \$1,000 = 0.0153.$$

2.	Quantity	Description	Unit Price	Amount
	250	Not pads	\$12.40 per C	\$31.00
	7 dozen	Rulers	31.60 per gross	252.00
	32	Files	21.60 per gross	64.80
	9 dozen	Notepaper	72.00 per gross	54.00
	15 cans	Staplers	33.20 per gross	41.50
		<b>Total</b>		<b>\$443.30</b>

\* If a total of \$40.50 is added to amount.

$$3. 15\% \text{ of } \$6,000 = \$900;$$

$$\$6,000 - \$900 = \$5,100;$$

$$\$5,100 \div 12 = \$425.$$



Sections 58-59.

Unit 13

Review Assignment 58b - Part 59a,  
Exercises 4-7 (for Review Assignment 58b),  
and Exercise 1 (for Part 59a).

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4.  $\$21,000 - \$20,200 = \$800;$   
 $36\% \text{ of } \$800 = \$288;$   
 $\$4,510 + \$288 = \$4,798;$   
 $\$4,798 - \$4,784 = \$14.$

5.  $60 \times \$18.125 = \$1,087.50;$   
 $\$1,087.50 + \$26.14 = \$1,113.64;$   
 $60 \times \$16.75 = \$1,005.00;$   
 $\$1,005.00 + \$27.34 = \$1,032.34;$   
 $\$1,113.64 - \$1,032.34 = \$81.30.$

6. a.  $0.97 \times \$330.00 = \$320.10.$   
 b.  $96\% \times \$250 = \$240.$

7.  $3.5 \text{ liters} \times \$ .19 = \$ .67.$

### Section 59.

1-1.	Item	List Price	Trade Discount	Trade Discount	Invoice Price
a.	Ski poles	\$ 24	40%	\$ 9.60	\$14.40
b.	Tape player	150	30%	45.00	105.00
c.	Vacuum cleaner	160	45%	72.00	88.00
d.	Lamp	18	15%	2.70	15.30
e.	Refrigerator	360	35%	126.00	234.00
f.	Food blender	70	25%	17.50	52.50
g.	Power saw	87	33 $\frac{1}{2}$ %	29.00	58.00

1-2.  $20 \times \$ 75 = \$1,500;$   
 $\$1,500 \times 32\% = \$480;$   
 $\$1,500 - \$480 = \$1,020.$

## Unit 13

## Section 59.

Part 59a - Review Assignment 59a.

Exercise 1 (for Part 59a),

and Exercises 1-2 (for Review Assignment 59a).

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(continued).

1-3.  $\$190 \times 40\% = \$76;$

$\$190 - \$76 = \$114.$

$\$168 \times 33\frac{1}{3}\% = \$56;$

$\$168 - \$56 = \$112.$

a. The England Wholesaler.

b.  $\$114 - \$112 = \$2.$

1-4.  $\$250 \times 30\% = \$75;$

$\$250 - \$75 = \$175.$

$\$225 \times 20\% = \$45;$

$\$225 - \$45 = \$180.$

a. The Path Home Furniture Company.

c.  $\$180 - \$175 = \$5.$

1-5.  $\$25 \times 20 = \$5,000;$

$\$5,000 \times 20\% = \$1,000;$

$\$5,000 - \$1,000 = \$4,000.$

1-6.  $\$.55 \times 120 = \$66.00;$

$\$66.00 \times 2\% = \$1.32;$

$\$66.00 - \$1.32 = \$64.68.$

$\$.55 \times 240 = \$132.00;$

$\$132.00 \times 3\% = \$3.96;$

$\$132.00 - \$3.96 = \$128.04.$

$\$66.00 + \$128.04 = \$194.04.$

$\$64.68 + \$128.04 = \$192.72;$

$\$194.04 - \$192.72 = \$1.32.$

Review Assignment 59a.

- discount sheet: (d) Shows discounts from list prices.  
invoice price: (c) List price less trade discounts; net price.

Section 59.

Review Assignment 59a.

Exercises 1-5.

Unit 13.

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list price: (a) A catalog price,  
quantity discount: (e) A trade discount  
based on amount purchased.

trade discount: (b) A discount from the  
list price given to retailers.

2. a.  $133\frac{1}{3}\%$  of  $\$35 = \$46.67$ .

b.  $\$175 \times 9\% (\$15.75)$  for 90 days =  $\$3.94$ .

c.  $\$1,800 \times 8\% (\$144.00)$  for 140 days =  $\$56.00$ .

d.  $\$13.50 \div \$1,000 = 0.0135$ .

3.  $\$27.50 \times 30\% = \$8.25$ ;

$\$27.50 - \$8.25 = \$19.25$ .

4.  $\$809,800 - \$32,300 = \$777,500$ ;

$\$777,500 \div \$12,444,000 = 0.06248$ ;

$0.06248 \times \$100 = \$6.25$ .

5.  $21 \text{ mi.} \div 35 \text{ mi.} = 136 \text{ min.}$



Unit 13.

Section 59.

Review Assignment 59a - Part 59b.

Exercises 6-8 (for Review Assignment 59a),  
and Exercise 2 (for Part 59b).

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Review Assignment 59a - Part 59b.

6.

Jan's Ski Area  
Daily Attendance

January 2 - January 9, 1981

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

\$0

\$50

\$100

\$150

\$200

\$250

\$300

\$350

\$400

\$450

\$500

7. a.  $0.02 \times \$525.00 = \$10.50$ .

b.  $5\% \times \$86.00 = \$4.30$ .

8. a.  $\$5.58$  increased by  $\frac{2}{3}$  of itself equals  $\$9.30$ .

b.  $\$55.00$  is  $55\%$  of  $\$100$ . Now  $\$36.00$ .

Part 59b.

2-1	Article	Original Price	Reduced Price	Trade Discount Amount	Trade Discount Rate
a.	Coat of arms	\$ 12	\$ 7.2	\$ 4.80	40%
b.	Sweater	27	17.55	9.45	35%
c.	End table	60	39.00	27.00	45%
d.	Lamp	26	19.50	6.50	25%
e.	Desk	135	90.00	45.00	33 $\frac{1}{3}$ %
f.	Chair	275	159.50	115.50	42%

## Section 59.

Unit 13.

Part 59b - Review Assignment 59a.

Exercise 2 (for Part 59a),

and Exercises 1-3 (for Review Assignment 59a).

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$$\begin{aligned} 2-2. \quad & \$80 - \$64 = \$16; \\ & \$16 \div \$80 = 20\%. \end{aligned}$$

$$\begin{aligned} 2-3. \quad & \$480 - \$312 = \$168; \\ & \$168 \div \$480 = 35\%. \end{aligned}$$

$$\begin{aligned} 2-4. \quad & a. \$240 + \$80 = \$320. \\ & b. \$80 \div \$320 = 25\%. \end{aligned}$$

$$\begin{aligned} 2-5. \quad & a. \$15 \times 24 = \$360. \\ & b. \$15 \times 6 = \$90; \\ & \quad \$90 \div \$450 = 20\%. \end{aligned}$$

$$\begin{aligned} 2-6. \quad & 7 \times \$2.10 = \$14.70; \\ & 1 \times \$2.10 = \$2.10; \\ & \$2.10 \div \$16.80 = 12.5\%. \end{aligned}$$

$$\begin{aligned} 2-7. \quad & 1 + 9 = 10; \\ & 1 \div 10 = 10\%. \end{aligned}$$

$$\begin{aligned} 1. \quad & a. 40 \div 3\frac{1}{2} = \frac{40}{\frac{7}{2}} = \frac{80}{7} = 11\frac{3}{7}. \\ & b. 166\frac{2}{3}\% \text{ of } \$70 = \$116.67. \\ & c. \$325 \times 10\% (\$32.50) \text{ for 40 days} \\ & \quad = \$3.61. \\ & d. \$9.75 \div \$1,000 = 0.00975. \end{aligned}$$

$$\begin{aligned} 2. \quad & \$17.50 - \$10.50 = \$7.00; \\ & \$7.00 \div \$17.50 = 40\%. \end{aligned}$$

$$\begin{aligned} 3. \quad & \$28.95 \times 33\frac{1}{3}\% = \$9.65; \\ & \$28.95 - \$9.65 = \$19.30. \end{aligned}$$





Section 59.  
Part 59c.  
Exercises 3-4.

Unit 13.

361

3-2.  $\$240.00 - 25\% (\$60.00) = \$180.00;$   
 $\$180.00 - 15\% (\$27.00) = \$153.00.$

3-3.  $\$87.50 - 30\% (\$26.25) = \$61.25;$   
 $\$61.25 - 20\% (\$12.25) = \$49.00;$   
 $\$49.00 - 10\% (\$4.90) = \$44.10;$   
 $4 \times \$44.10 = \$176.40.$

3-4.  $\$1,000.00 - 20\% (\$200.00) = \$800.00;$   
 $\$800.00 - 12\frac{1}{2}\% (\$100.00) = \$700.00;$   
 $\$700.00 - 5\% (\$35.00) = \$665.00.$

3-5.  $\$32.50 - 20\% (\$6.50) = \$26.00;$   
 $\$26.00 - 15\% (\$3.90) = \$22.10;$   
 $\$22.10 - 5\% (\$1.10) = \$21.00;$   
 $32 \times \$21.00 = \$672.00.$

3-6. Davis Company:  $\$1,200 - 25\% (\$300) = \$900;$   
 $\$900.00 - 20\% (\$180.00) = \$720.00;$   
 $\$720.00 - 10\% (\$72.00) = \$648.00.$

Goss Brothers:  $\$1,200 - 30\% (\$360) = \$840;$   
 $\$840.00 - 20\% (\$168.00) = \$672.00;$   
 $\$672.00 - 5\% (\$33.60) = \$638.40.$

$\$648.00 - \$638.40 = \$9.60.$  Goss  
Brothers has the better offer.

4-1. a.  $100\% - 25\% = 75\%; 75\% - 15\%$   
 $(20\% \text{ of } 75\%) = 60\%; 100\% - 60\% = 40\%.$

b.  $100\% - 20\% = 80\%; 80\% - 10\%$   
 $(12\frac{1}{2}\% \text{ of } 80\%) = 70\%; 100\% - 70\% = 30\%.$

c.  $100\% - 16\frac{2}{3}\% = 83\frac{1}{3}\%; 83\frac{1}{3}\% - 8\frac{1}{2}\%$   
 $(10\% \text{ of } 83\frac{1}{3}\%) = 75\%; 100\% - 75\% = 25\%.$

Unit 13. Section 59.  
Part 59c.  
Exercises 4-5.

Exercise 4  
(Continue)

$$1. \quad 100\% - 25\% = 75\%; \quad 75\% - 15\% \\ (25\% \text{ of } 75\%) = 62\%; \quad 75\% - 12\% \\ (25\% \text{ of } 62\%) = 48\%; \quad 100\% - 48\% = 52\%.$$

$$2. \quad 100\% - 33\% = 67\%; \quad 67\% - 14\% \\ (20\% \text{ of } 67\%) = 55\%; \quad 55\% - 7\% \\ (12\% \text{ of } 55\%) = 44\%; \quad 100\% - 44\% = 56\%.$$

$$3. \quad 100\% - 20\% = 80\%; \quad 80\% - 16\% \\ (20\% \text{ of } 80\%) = 54\%; \quad 54\% - 8\% \\ (15\% \text{ of } 54\%) = 36\%; \quad 100\% - 36\% = 64\%.$$

$$4. \quad 100\% - 25\% = 75\%; \quad 75\% - 16\% \\ (25\% \text{ of } 75\%) = 51\%; \quad 51\% - 9\% \\ (15\% \text{ of } 51\%) = 36\%; \quad 100\% - 36\% = 64\%.$$

$$5. \quad 100\% - 33\% = 67\%; \quad 67\% - 13\% \\ (20\% \text{ of } 67\%) = 50\%; \quad 50\% - 5\% \\ (10\% \text{ of } 50\%) = 35\%; \quad 100\% - 35\% = 65\%.$$

$$6. \quad 100\% - 25\% = 75\%; \quad 75\% - 12\% \\ (25\% \text{ of } 75\%) = 53\%; \quad 53\% - 8\% \\ (15\% \text{ of } 53\%) = 34\%; \quad 100\% - 34\% = 66\%.$$

$$7. \quad 100\% - 25\% = 75\%; \quad 75\% - 7\% \\ (10\% \text{ of } 75\%) = 67.5\%; \quad 67.5\% - 6.75\% \\ (10\% \text{ of } 67.5\%) = 60.75\%; \quad 100\% - 60.75\% = 39.25\%.$$

$$8. \quad 100\% - 30\% = 70\%; \quad 70\% - 7\% \\ (10\% \text{ of } 70\%) = 63\%; \quad 63\% - 6.3\% \\ (10\% \text{ of } 63\%) = 56.7\%; \quad 100\% - 56.7\% = 43.3\%.$$

$$9. \quad 100\% - 20\% = 80\%; \quad 80\% - 5\% \\ (7.5\% \text{ of } 80\%) = 74\%; \quad 74\% - 4.5\% \\ (6\% \text{ of } 74\%) = 68.6\%; \quad 100\% - 68.6\% = 31.4\%.$$

$$10. \quad 100\% - 15\% = 85\%; \quad 85\% - 12\% \\ (14\% \text{ of } 85\%) = 76.5\%; \quad 76.5\% - 7.65\% \\ (10\% \text{ of } 76.5\%) = 68.85\%; \quad 100\% - 68.85\% = 31.15\%.$$

$$11. \quad 100\% - 10\% = 90\%; \quad 90\% - 10\% = 80\%; \quad 80\% - 5\% = 75\%; \\ 75\% - 7.5\% = 67.5\%; \quad 100\% - 67.5\% = 32.5\%.$$

## Section 59.

Unit 13.

Part 59c - Review Assignment 59c.

Exercises 5-6 (for Part 59c),  
and Exercises 13 (for Review Assignment 59c).

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e.  $100\% - 20\% = 80\%$ ;  $100\% - 10\% = 90\%$ ;  $100\% - 10\% = 90\%$ ;

$.8 \times .9 \times .9 = .648$ ;  $100\% - 64.8\% = 35.2\%$ .

f.  $100\% - 15\% = 85\%$ ;  $100\% - 10\% = 90\%$ ;  $100\% - 5\% = 95\%$ ;

$.85 \times .9 \times .95 = .72675$ ;  $100\% - 72.675\% = 27.325\%$ .

g.  $100\% - 10\% = 90\%$ ;  $100\% - 5\% = 95\%$ ;  $100\% - 5\% = 95\%$ ;

$.9 \times .95 \times .95 = .81225$ ;  $100\% - 81.225\% = 18.775\%$ .

h.  $100\% - 30\% = 70\%$ ;  $100\% - 20\% = 80\%$ ;  $100\% - 20\% = 80\%$ ;

$.7 \times .8 \times .8 = .448$ ;  $100\% - 44.8\% = 55.2\%$ .

i.  $100\% - 30\% = 70\%$ ;  $100\% - 25\% = 75\%$ ;  $100\% - 5\% = 95\%$ ;

$.7 \times .75 \times .95 = .49875$ ;  $100\% - 49.875\% = 50.125\%$ .

6-1.	Item	List Price	Trade Discounts	Invoice Price
a.	Calculator	\$120	10%, 5%	\$102.60
b.	Desk	250	30%, 5%	166.25
c.	Cabinet	200	20%, 10%, 10%	129.60
d.	Typewriter	450	25%, 10%	303.75
e.	Chair	70	15%, 5%	56.53

1. complement: (c) The difference between a discount rate and 100%.

series of discounts: (b) Two or more trade discounts, single discount equivalent: (a) One discount that equals a series.

2. a.  $16\frac{1}{2} \div 1\frac{3}{8} = \frac{33\frac{1}{2}}{8} \times \frac{8}{11} = 12$ ;

b.  $\frac{2}{3}$  greater than \$3.00 is \$4.80.

c.  $133\frac{1}{3}\%$  of \$23.00 is = \$30.67.

d. \$1.25 is  $\frac{2}{3}$  is smaller than \$2.00.

3.  $100\% - 30\% = 70\%$ ;  $70\% - 10.5\%$   
(15% of 70%) = 59.5%;  $100\% - 59.5\% = 40.5\%$ .



Unit 13.

Section 59.

Review Assignment # 59c.

Exercises 4-9.

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F. 59c

4. Ashford Furniture Company:  $\$480 - 30\% (\$120) = \$260$

$\$260 - 15\% (\$42) = \$238.00$

Norlake Furniture Company:  $\$480 - 30\% (\$144) = \$336$

$\$336 - 15\% (\$50.4) = \$285.60$

$\$285.60 - 10\% (\$28.56) = \$257.04$

a. Ashford Furniture Company.

b.  $\$257.04 - \$238.00 = \$19.04$

5.  $\$32.32 - \$24.20 = \$6.00$ ; 20% discount

6.  $\$525.00 - 12\% (\$63.00) = \$462.00$

$\$462.00 - 15\% (\$69.30) = \$406.50$

$\$406.50 - 15\% (\$60.98) = \$357.77$

$\$357.77 - 12\% (\$42.94) = \$314.84$

$\$314.84 - 12\% (\$37.78) = \$277.06$

$\$277.06 - 12\% (\$33.25) = \$243.81$

7. 54 min. 15 sec - 2 min = 52 min.

8. 1 hr 15 min = 5 1/2 hr.

9. a.  $0.98 \times \$410.00 = \$401.80$

b.  $1.02 \times \$420.00 = \$428.40$

Section 59, 60.

Review Assignment 59c, Part C

Exercises 10-12, Review Assignment 59d

Unit 13.

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10. Gross Sales:	\$ 130,000
Sales Returns:	<u>2,600</u>
Net Sales:	\$ 127,400

Purchases:	\$ 79,250
Purchases Returns:	<u>1,230</u>
Net Purchases:	\$ 78,020

Merchandise Inventory, Jan. 1:	\$ 42,163
Net Purchases:	<u>+ 78,020</u>
Merchandise Available for Sale:	\$ 120,183
Merchandise Inventory, Dec. 31:	<u>- 37,373</u>
Cost of Merchandise Sold:	\$ 82,810

Net Sales:	\$ 127,400
Cost of Merchandise Sold:	<u>- 82,810</u>
Gross Profit:	\$ 44,590
Operating Expenses:	<u>- 34,400</u>
Net Income:	\$ 10,190

11. a.  $4.5 \text{ m} \times 3.6 \text{ m} = 16.2 \text{ m}^2$ .  
 b.  $16.2 \text{ m}^2 - 10\% (1.62 \text{ m}^2) = 14.58 \text{ m}^2$ .

12. a.  $80\% \text{ of } \$50,000 = \$40,000$ ;  
 $\$36,000 \div \$40,000 = 0.90$ ;  
 $0.90 \times \$13,000 = \$11,700$ .  
 b. 90%.

Unit 13.

Section 60.  
Part 60a.  
Exercises 1-2.

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Section 60

1-1.	Date of	Term	Date Paid
a.	August 16	2/10, EOM	Sept. 1
b.	August 31	3/10, m/30	Sept. 10
c.	Sept. 20	3/15, m/60	Oct. 5
d.	April 25	2/10, E	May 5
e.	Oct. 28	3/15, m/60	Nov. 12
f.	Jan. 20	2/20 EOM	Feb. 9

1-2.	Date of	Term	Date Paid	Rate
a.	Mar. 16	1/10, m/30	April 5	1%
b.	May 22	3/15, m/60	June 4	3%
c.	July 25	3/10, m/45	August 5	0%
d.	Sept. 18	2/30, m/60	Oct. 17	2%
e.	October 10	2/10, 1/30, m/60	October 28	1%
f.	February 28*	3/10, 2/30, m/60	March 9	3%
g.	January 15	3/5, 2/10, m/60	February 10	0%
h.	November 1	3/10, 1/30, m/60	December 1	1%
i.	June 12	3/10 EOM	June 10	3%
j.	April 25	4/30 EOM	May 25	0%

	Date of	Amount	Term	Date Paid	Amount Paid to Per
2-1.	July 1	\$450	2/10, m/30	Aug. 6	\$441.00
2-2.	Nov. 24	675	3/10, m/30	Dec. 3	654.75
2-3.	Jan. 15	780	2/10, 1/30, m/60	July 12	772.20
2-4.	Aug. 21	844	5/10, 2/30, m/60	Sept. 17	827.12
2-5.	Apr. 6	520	2/10, 1/30, m/45	May 26	520.00
2-6.	Oct. 15	395	3/10 EOM	Nov. 8	383.15

\* Providing that March 1 follows Feb. 28.



## Section 60.

Unit 13.

Part 60a - Review Assignment 60a.

Exercise 3 (for Part 60a),

and Exercises 1-5 (for Review Assignment 60a).

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3-1.	List Price	Trade Discount	Terms	Cash Price *
a.	\$800	25%, 10%	2/30, n/60	\$ 529.20
b.	550	20%, 15%	1/10, n/30	370.26
c.	700	30%, 10%	2/10, n/30	432.18
d.	650	20%, 20%	3/10, n/60	403.52
e.	250	20%, 10%, 5%	5/10, n/60	162.45

\* If paid within discount period.

3-2.  $\$680.00 - 20\% (\$136.00) = \$544.00$ ;  
 $\$544.00 - 10\% (\$54.40) = \$489.60$ ;  
 Aug. 16 to Sept. 12: 27 days;  
 $\$489.60 - 2\% (\$9.79) = \$479.81$ .

1. cash discount: (d) Discount given for early payment.  
 cash price: (a) Invoice price less cash discount.  
 discount period: (c) Number of days for a cash discount.  
 EOM: (b) End-of-month invoice date.

2. a.  $28\frac{1}{2} \times 22\frac{3}{4} = \frac{57}{2} \times \frac{91}{4} = \frac{5187}{8} = 648\frac{3}{8}$   
 b.  $137\frac{1}{2}\%$  of  $\$3.00 = \$4.13$ .  
 c.  $\$42 \div \$1,000 = 0.042$ .

3. May 28\*\* + 10 days = June 7.

4. July 28 to August 22: 25 days;  
 $\$675.00 - 2\% (\$13.50) = \$661.50$ .

5.  $\$1,100 - 20\% (\$220) = \$880$ ;  
 $\$880 - 10\% (\$88) = \$792$ ;  
 May 8 to May 18: 10 days;  
 $\$792.00 - 1\% (\$7.92) = \$784.08$ .

\* That's when I met Landie Evercom, and she, too, kicked her shoes off!

Unit 13.

Section 60.

Review Assignment 60a - Part 60b,  
Exercises 6-10 (for Review Assignment 60a),  
and Exercise 4 (for Part 60b).

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Review Assignment  
60a (continued).

6.  $\$85.00 - \$59.50 = \$25.50$   
30% discount.

7. Factory A:  $\$195.00 - 25\% (\$48.75) = \$146.25$   
 $\$146.25 - 20\% (\$29.25) = \$117.00$   
 Factory B:  $\$190.00 - 33\frac{1}{3}\% (\$63.33) = \$126.67$   
 $\$126.67 - 10\% (\$12.67) = \$114.00$   
 Factory B is cheaper:  $\$117.00 - \$114.00 = \$3.00$

8.  $100\% - 25\% = 75\%$   
 $75\% - 7.5\% (10\% of 75\%) = 67.5\%$   
 $100\% - 67.5\% = 32.5\%$

9. a.  $\$9.00$  is 7.5% of  $\$12.00$   
 b.  $0.07\frac{1}{2} = \frac{7.5}{100} = \frac{3}{40}$

10. Total sale,  $\$73.45$   
 Sales tax (5%),  $\$3.52$   
 Total price,  $\$51.15$

Part 60b. 4-1.  $\$875.00 \times 9\% (\$78.75)$  for 60 days =  $\$13.13$   
 $\$26.00 - \$13.13 = \$12.87$

4-2.  $\$543.00 \times 9\% (\$48.87)$  for 90 days =  $\$7.50$   
 $\$16.00 - \$7.50 = \$8.50$

4-3.  $\$900.00 - \$27.00 = \$873$   
 $\$873.00 \times 9\% (\$78.57)$  for 20 days =  $\$4.37$   
 $\$27.00 - \$4.37 = \$22.63$



# Section 60.

Unit 13.

Part 60b - Review Assignment 60b.

Exercise 4 (for Part 60b),

and Exercises 1-5 (for Review Assignment 60b).

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$$4-4. \$750.00 - \$22.50 = \$727.50;$$

$$\$727.50 \times 10\% (\$72.75) \text{ for 80 days} = \$16.17;$$

$$\$22.50 - \$16.17 = \$6.33.$$

$$4-5. \$3,000.00 - \$60.00 = \$2,940.00;$$

$$\$2,940.00 \times 10\% (\$294.00) \text{ for 50 days} = \$40.83;$$

$$\$60.00 - \$40.83 = \$19.17.$$

$$4-6. \$960.00 - \$19.20 = \$940.80;$$

$$\$940.80 \times 7\% (\$65.86) \text{ for 30 days} = \$5.49;$$

$$\$19.20 - \$5.49 = \$13.71.$$

$$1. a. 24\frac{3}{4} \times 18\frac{3}{4} = \frac{99}{4} \times \frac{75}{4} = \frac{925}{2} = 462\frac{1}{2}.$$

$$b. 30 \div 2\frac{1}{4} = \frac{30}{1} \times \frac{4}{9} = \frac{120}{9} = 13\frac{1}{3}.$$

$$c. 133\frac{1}{3}\% \text{ of } \$4.50 \text{ is } \$6.00.$$

$$2. a. \$1,700.00 - 3\% (\$51.00) = \$1,649.00.$$

$$b. \$1,649.00 \times 9\% (\$148.41) \text{ for 50 days} = \$20.61;$$

$$\$51.00 - \$20.61 = \$30.39.$$

$$3. \$1,350 - 5\% (\$67.50) = \$1,282.50.$$

$$4. \$1,540.00 - 10\% (\$154.00) = \$1,386.00;$$

$$\$1,386.00 - 5\% (\$69.30) = \$1,316.70;$$

$$\$1,316.70 - 2\% (\$26.33) = \$1,290.37.$$

$$5. Fryer Sisters: \$2,220 - 15\% (\$333) = \$1,887;$$

$$\$1,887.00 - 10\% (\$18.87) = \$1,698.30.$$

$$\text{Rose \& Filkins: } \$2,250 - 25\% (\$562.50) = \$1,687.50.$$

Rose & Filkins has better deal;

$$\$1,698.30 - \$1,687.50 = \$10.80.$$

I wonder if he borrowed the money during the baseball strike?



## Unit 13.

## Section 60.

Review Assignment 60b - Part 60c.

Exercises 6-8 (for Review Assignment 60b),  
and Exercise 5 (for Part 60c).

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Review Assignment 60b (Cont.)

$$6. \quad 100\% - 20\% = 80\%;$$

$$80\% - 4\% (5\% \text{ of } 80\%) = 76\%;$$

$$100\% - 76\% = 24\%.$$

$$7. \quad a. \begin{array}{r} 153 \text{ cm} \\ \times 76 \text{ cm} \\ \hline 918 \\ 1071 \\ \hline 11628 \text{ cm} \end{array}$$

$$b. \quad \begin{array}{r} 116.28 \text{ m} \\ 100 \overline{) 11628 \text{ cm}} \end{array}$$

$$8. \quad a. \quad \$7.50 \text{ is } 150\% \text{ of } \$3.00.$$

$$b. \quad \frac{1}{150} = .0067,$$

$$c. \quad \$13.50 \text{ is } 37\frac{1}{2}\% \text{ of } \$36.00.$$

$$d. \quad \$1.60 \text{ is } \frac{1}{4} \text{ of } \$6.40.$$

Part 60c.	5-1.	Invoice Price	Cash Price	Cash Discount	Rate of Discount
	a.	\$350	\$343	\$ 7	2%
	b.	375	360	15	4%
	c.	420	399	21	5%
	d.	600	582	18	3%
	e.	750	735	15	2%
	f.	280	266	14	5%
	g.	800	776	24	3%

$$5-2. \quad a. \quad \$500.00 - \$490.00 = \$10.00;$$

$$b. \quad \$10.00 \div \$500.00 = 2\%.$$

$$5-3. \quad \$450.00 - \$436.50 = \$13.50;$$

$$\$13.50 \div \$450.00 = 3\%.$$

## Section 60.

Unit 13.

Part 60c - Review Assignment 60c.

Exercises 5-6 (for Part 60c),

and Exercises 1-2 (for Review Assignment 60c).

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$$5-4. \quad \$120.00 - \$114.00 = \$6.00;$$
$$\$6.00 \div \$120.00 = 5\%.$$

$$5-5. \quad \$200.00 - \$195.00 = \$5.00;$$
$$\$5.00 \div \$200.00 = 2.5\%.$$

$$6-1. \quad \$13.50 \div 3\% = \$450.00.$$

$$6-2. \quad \$8.46 \div 2\% = \$423.00.$$

$$6-3. \quad \$34.67 \div 5\% = \$693.40.$$

$$6-4. \quad \$15.80 \div 4\% = \$395.00.$$

$$6-5. \quad 100\% - 3\% = 97\%.$$

$$6-6. \quad \$873.00 + 3\% (\$27.00) = \$900.00.$$

$$6-7. \quad \$313.60 + 2\% (\$6.40) = \$320.00.$$

$$6-8. \quad \$636.50 + 5\% (\$33.50) = \$670.00.$$

$$1. \quad \$485.00 - \$470.45 = \$14.55;$$
$$\$14.55 \div \$485.00 = 3\%.$$

$$2. \quad \$2,450.00 - 2\% (\$49.00) = \$2,401.00;$$
$$\$2,401.00 \times 9\% (\$216.09) \text{ for 20 days} = \$12.01;$$
$$\$49.00 - \$12.01 = \$36.99.$$

$$3. \quad 100\%$$

Unit 13.

Section 60,

Review Assignment 60:

Exercises 3-7.

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Review Assignment  
60.C (continued)

3.  $100\% - 20\% = 80\%$   
 $80\% - 8\% (10\% \text{ of } 80\%) = 72\%$   
 $72\% - 3.6\% (5\% \text{ of } 72\%) = 68.4\%$   
 $100\% - 68.4\% = 31.6\%$

4.  $\$101.70 \times 4 = \$406.80$   
 $\$847.50 - \$406.80 = \$440.70$

5. Rayna's Roadside Stand  
Daily Sales  
July 6 - July 12, 1981

Sunday

Monday

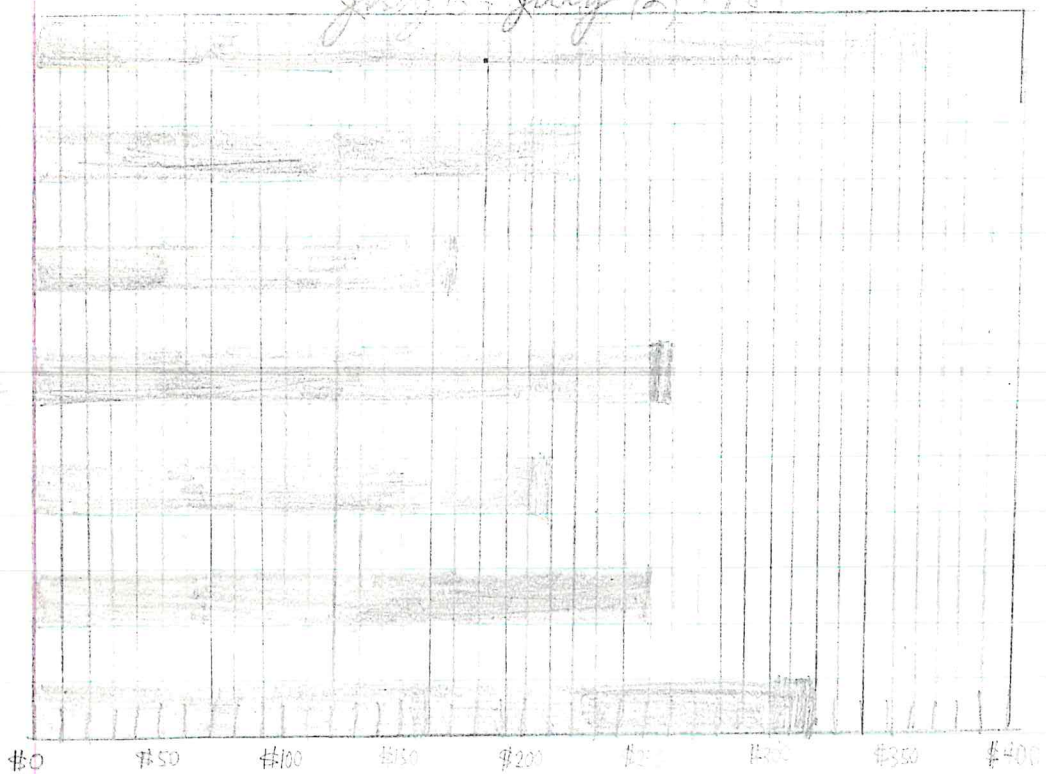
Tuesday

Wednesday

Thursday

Friday

Saturday



6. a.  $0.96 \times \$350 = \$336$   
b.  $97\% \times \$400 = \$388$

7.  $\$750 \div \$200 = 3.75 \text{ cm.}$



Sections 60-61.

Review Assignment 60c-Section 61.

Exercises 8-9 (for Review Assignment 60c),  
and Exercise 1 (for Section 61).

8. a. \$16.25 is 130% of \$12.50.

b.  $0.97 \times \$840.00 = \$814.80$ .

9.  $\$13.29 \div 2\% = \$664.50$ .

## Section 61.

1-1. a. Northern Motors, Inc., Rosedale.

b.  $\$48.75 + \$4.38 = \$53.13$ .

1-2. a.  $15 \times \$120.00 = \$1,800.00$ ;

$\$1,800.00 - 25\% (\$450.00) = \$1,350.00$ ;

$\$1,350.00 - 20\% (\$270.00) = \$1,080.00$ ;

$\$1,080.00 + \$72.30 = \$1,152.30$ .

b.  $\$1,152.30 \div 15 = \$76.82$ .

1-3. a.  $\$90.00 \times 2 = \$180.00$ ;

$\$180.00 - 20\% (\$36.00) = \$144.00$ ;

$\$144.00 - 10\% (\$14.40) = \$129.60$ ;

$\$129.60 + \$5.30 = \$134.90$ .

b.  $\$134.90 \div 24 = \$5.62$ .

1-4. (a) Manufacturer	List Price of Item	Trade Discounts	Invoice Price of Item	Transportation	Total Cost of Item
A	\$80	10%, 10%	\$64.80	\$4.33	\$69.13
B	90	15%, 10%, 10%	61.97	4.50	66.47
C	80	15%, 5%	64.60	4.25	68.85
D	70	5%	66.50	4.75	71.25

b. Manufacturer B, costing only \$66.47, should be bought.

## Unit 13,

## Section 61,

## Review Assignment 61,

## Exercises 1-4.

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Review Assignment  
51.

1. buying expense: (c) costs of buying goods and getting them to you.

f.o.b.: (a) Free on board.

total cost: (b) invoice or cash price plus buying expenses.

2. a.  $27 \times 2\frac{3}{4} = 27 \times \frac{11}{4} = \frac{297}{4} = 74\frac{1}{4}$

b.  $37\frac{1}{2} \div 1\frac{2}{3} = \frac{75}{2} \div \frac{4}{3} = \frac{75 \times 3}{2 \times 4} = 28\frac{1}{8}$

c. \$17.85 is 110% greater than \$8.50.

d. May 8 to Oct 3: 148 days.

e.  $8.5 \text{ miles} \div \$1,000 = 0.0085$

3.  $\$92.50 - 25\% (\$23.13) = \$69.37$

$\$69.37 - 20\% (\$13.87) = \$55.50$

$\$55.50 - 10\% (\$5.55) = \$49.95$

4. Labm firm:  $\$480.00 - 20\% (\$96.00) = \$384.00$

$\$384.00 - 10\% (\$38.40) = \$345.60$

$\$345.60 - 10\% (\$34.56) = \$311.04$

Melrose firm:  $\$520.00 - 25\% (\$125.00) = \$395.00$

$\$395.00 - 20\% (\$79.00) = \$316.00$

Melrose firm has better offer:

$\$311.04 - \$300.00 = \$11.04$



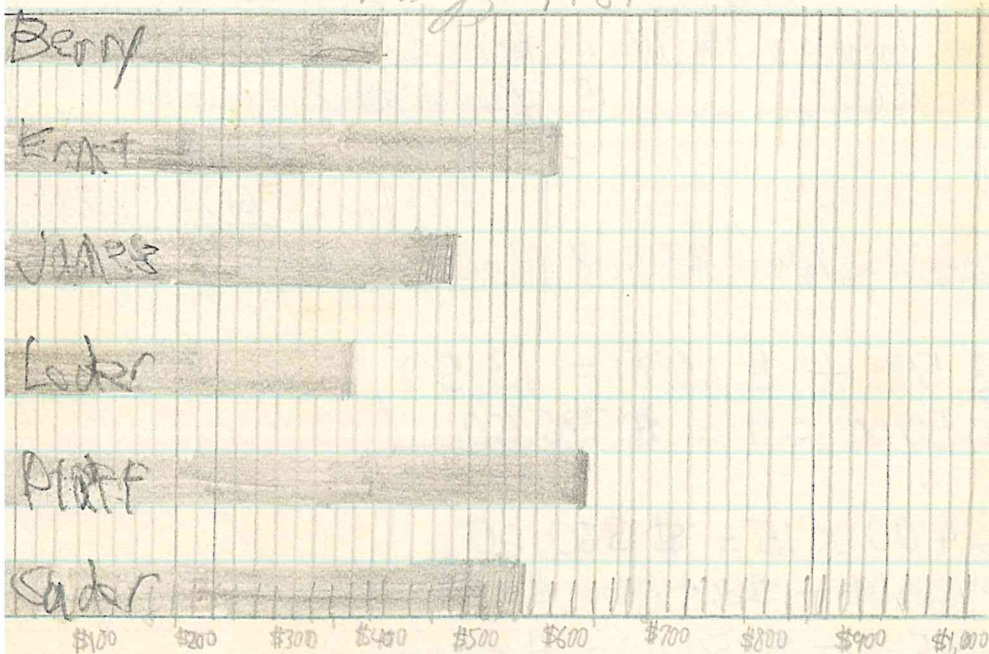
Section 61.

Unit 13.

Review Assignment 61—General Review  
Exercises 5-7 (for Review Assignment 61),  
and Exercise 1 (for General Review).

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5. Lubin's Clothing Store  
Average Daily Sales  
May 1981



6.  $100\% - 20\% = 80\%$ ;  
 $80\% - 12\% (15\% \text{ of } 80\%) = 68\%$ ;  
 $100\% - 68\% = 32\%$ .

7.  $3\% \times \$420.00 = \$12.60$ .

1. a.  $45.72 \times 2.08 = 95.0976$ .

b.  $67.14 \div 1.8 = 37.3$ .

c.  $6\frac{5}{14} + 15\frac{2}{7} + 8\frac{1}{2} + 4\frac{3}{4} = 6\frac{10}{28} + 15\frac{8}{28} + 8\frac{14}{28} + 4\frac{21}{28} = 34\frac{25}{28}$ .

d.  $75\frac{3}{5} - 8\frac{2}{3} = 75\frac{9}{15} - 8\frac{10}{15} = 66\frac{14}{15}$ .

e.  $48\frac{1}{4} \times 8\frac{1}{3} = \frac{193}{4} \times \frac{25}{3} = \frac{4825}{12} = 402\frac{1}{12}$ .

f.  $12\frac{2}{3} \div 3\frac{1}{6} = \frac{38}{3} \times \frac{6}{19} = 4$ .

g.  $\frac{5}{9} = .56$ .

h.  $\frac{6}{7} = 85.7\%$ .



## Unit 13.

Section 61.  
General Review.  
Exercises 2-6.

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General Review  
(continued).

2.

Ralph Malone Reconciliation Statement July 1, 1981			
Checkbook balance:	\$ 716.33	Bank statement balance:	\$800.58
Less service charge:	1.15	Less outstanding checks:	
		# 79	\$24.18
		# 82	61.22
			85.40
Correct checkbook balance:	\$715.18	Available bank balance:	\$715.18

$$3. \quad \$13,500 \div \$1,000 = 13.50;$$

$$\$13.50 \times 59 = \$796.50.$$

$$4. \quad \$24.00 \times 15 = \$360.00;$$

$$\$360.00 + \$35.00 = \$395.00;$$

$$\$395.00 - \$350.00 = \$45.00.$$

$$5. \quad \$258.00 \times 12 = \$3,096.00;$$

$$\$3,096.00 \div \$700.00 = \$3,796.00;$$

$$\$3,796.00 - \$3,500.00 = \$296.00;$$

$$\$3,500.00 - \$700.00 = \$2,800.00;$$

$$\$2,800.00 \times 9\% = \$252.00;$$

$$\$2,800.00 + \$252.00 = \$3,052.00;$$

$$\$3,096.00 - \$3,052.00 = \$44.00.$$

$$6. \quad \$1,502 - \$32 = \$1,470;$$

$$\$1,470 \div \$42 = \$35.$$

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7.  $\$27.50 \times 40 = \$1,100.00;$   
 $\$1,100.00 + \$27.00 = \$1,127.00;$   
 $4 \times \$0.325 = \$1.30;$   
 $\$1.30 \times 40 = \$52.00;$   
 $\$52.00 \div \$1,127.00 = 4.6\%.$

8. September 20 + 4 months = January 20.  
 $\$960.00 \times 10\% (\$96.00) \text{ for 4 months}$   
 $= \$384.00.$

9.  $80\% \text{ of } \$60,000 = \$48,000;$   
 $\$48,000 \div \$100 = \$480;$   
 $\$480.00 \times \$0.53 = \$254.40.$

10.  $\$10,000 + \$15,000 + \$25,000 = \$50,000;$   
 $\$10,000 \div \$50,000 = 0.2; 0.2 \times \$7,000 = \$1,400;$   
 $\$15,000 \div \$50,000 = 0.3; 0.3 \times \$7,000 = \$2,100;$   
 $\$25,000 \div \$50,000 = 0.5; 0.5 \times \$7,000 = \$3,500;$   
Company A: \$1,400.  
Company B: \$2,100.  
Company C: \$3,500.

11.  $\$1,725.00 - 8\% (\$138.00) = \$1,587.00.$   
 $\$138.00 \div 12 = \$11.50.$

Unit 13.

Section 61.  
General Review,  
Exercises 12-16.

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General Review  
(continued).

12. Insurance: \$ 475.00  
License plates: 35.00  
Gasoline and oil: 525.00  
Repairs: 90.00  
Interest (6% of \$6,200.00): 372.00  
Depreciation (25% of \$6,200.00): 1,550.00  
Total car expense: \$ 3,047.00

13.  $\$439,010 \div \$6,140,000 = 0.0715,$

14.  $2\% \text{ of } \$1,000 = \$ 20.00$   
 $3\% \text{ of } 1,562 = + 46.86$   
 $\$2,562 = \$ 66.86$

15.  $\$ .75 \times 380 = \$ 285.00$   
 $.50 \times 1,360 = + 680.00$   
 $\$ 965.00$

$\$965 - \$297 = \$668,$

16.  $\$29,370 \times 6.13\% = \$1,800.38,$



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17.  $\$500 \div 5.5 \text{ centimeters} = \$90.91.$

18.  $0.525 = \frac{525}{1,000} = \frac{21}{40}$

19.

Alma Oakley Reconciliation Statement November 30, 1980	
Checkbook balance: \$ 849.12	Bank statement balance: \$1,191.86
Add:	Less outstanding checks:
Deposit not recorded 175.57	#543 \$ 79.84
	#544 59.73
	#545 27.60 167.17
Correct checkbook balance: \$1,024.69	Available bank balance: \$1,024.69

20.  $\$1,700 - \$1,000 = \$700;$   
 $\$700 \div 4\% = \$17,500.$

21. Total sale, \$ 35,880.00.  
Sales tax (4%), 1,380.00.  
Retail sales, \$ 34,500.00.

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## Unit 14, Section 62.

1-1.

Cash Proof Form April 9, 1981	
Change fund	\$ 25.00
Register total of cash received	275.23
Total	\$ 300.23
Register total of cash paid out	9.64
Cash that should be in drawer	\$ 290.59
Cash actually in drawer	\$ 290.84
Cash short	
Cash over	\$ .25

1-2.

Cash Proof Form September 4, 1981	
Change fund	\$ 30.00
Register total of cash received	298.24
Total	\$ 328.24
Register total of cash paid out	34.11
Cash that should be in drawer	\$ 294.13
Cash actually in drawer	\$ 294.63
Cash short	
Cash over	\$ .50

1-3.

Cash Proof Form March 1, 1981	
Change fund	\$ 50.00
Register total of cash received	307.43
Total	\$ 357.43
Register total of cash paid out	18.75
Cash that should be in drawer	\$ 338.68
Cash actually in drawer	\$ 338.58
Cash short	\$ .10
Cash over	



Section 62.  
Exercises 1-2.

Unit 14

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1-4.	32	for	\$ 1.25 =	\$ 40.00
	24	for	1.30 =	31.20
	26	for	1.35 =	35.10
	30	for	1.40 =	42.00
	36	for	1.45 =	52.20
	43	for	1.50 =	64.50
	38	for	1.55 =	58.90
	74	for	1.60 =	118.40
	93	for	1.65 =	153.45
	104	for	1.70 =	176.80
	132	for	1.75 =	231.00
	110	for	1.80 =	198.00
	74	for	1.85 =	136.90
	72	for	1.90 =	136.80
	62	for	1.95 =	120.90
	Total:			<u>\$1,596.15</u>

$$\$ 75.00 + \$1,596.15 = \$1,671.15;$$

$$\$1,671.15 - \$1,670.30 = \$ .85;$$

Short, by 85¢.

2-1. (a) Daily Summary - Cash Sales  
June 5, 1981

Department	Sales	Sales Returns	Net Sales
Clothing	\$3,734	\$ 38	\$ 3,696
Hats	632	7	625
Shoes	806	15	791
Handbags	925	16	909
(b) Totals	\$6,097	\$ 76	\$6,021



Unit 14.

Section 62.  
Exercise 2.

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Exercise 2  
(continued). 2-2.

Daily Sales Summary January 16, 1981			
Salespersons	Cash Sales	Charge Sales	Total Sales
D. Ault	\$ 395.60	\$ 384.30	\$ 779.90
H. Carver	276.54	265.46	542.00
J. Clow	266.68	254.23	520.91
E. Harrick	124.25	115.20	239.45
H. LaHarce	156.80	134.75	291.55
D. Werr	228.20	96.45	324.65
Totals	\$1,448.07	\$1,250.39	\$2,698.46

2-3.  $\$92,400 + 14\% (\$12,936) = \$105,336.$

2-4. a.

January	794
February	968
March	482
April	354
May	270
June	235
July	531
August	1,620
September	5,163
October	2,040
November	1,326
December	3,461
<u>Total</u>	<u>17,244</u>

b.  $17,244 \div 12 = 1,437.$

c. The months August, September, October, and December exceeded its monthly average.

## Section 62-

Unit 14.

Review Assignment 62.

Exercises 2 (for Section 62),  
and Exercises 1-3 (for Review Assignment 62).

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2-5. a.  $\$3,750 - \$3,000 = \$750$ ,  
b.  $\$750 = 25\%$ .

2-6.

Department	Last Year	This Year	Percent Increase	Percent Decrease
Paint	\$36,800	\$39,200	6.5%	
Wallpaper	19,200	18,600		3.1%

1. cash over: (c) More cash than you should have.  
cash register: (a) Keeps track of cash received and paid out.  
cash short: (b) Less cash than you should have.

2. a.  $9\frac{2}{3} = 9\frac{8}{12}$   
 $12\frac{3}{4} = 12\frac{9}{12}$   
 $+ 15\frac{5}{6} = + 15\frac{10}{12}$   
 $36\frac{27}{12} = 38\frac{3}{12} = 38\frac{1}{4}$   
 b.  $23\frac{1}{3} \div 1\frac{5}{4} = \frac{70}{3} \times \frac{4}{7} = \frac{280}{21} = 13\frac{1}{3}$   
 c. \$40.15 is 27% less than \$55.00.  
 d.  $\$1,150 \times 11\% (\$126.50)$  for 180 days  
 $= \$63.25$ .  
 e.  $3545 L = 3,545 kl$ .

Cash Proof Form  
May 2, 1981

Change fund	\$ 30.00
Register total of cash received	481.32
Total	\$ 511.32
Register total of cash paid out	24.88
Cash that should be in drawer	\$ 486.44
Cash actually in drawer	\$ 486.59
Cash short	
Cash over	\$ .15

Unit 14.

Sections 62-63.

Review Assignment 62 - Part 63a.

Exercises 4-7 (for Review Assignment 62),  
and Exercise 1 (for Part 63a).

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Review Assignment  
62 (continued).

4.  $\$220.00 - \$192.50 = \$27.50;$   
 $12\frac{1}{2}\%$  discount.

5.  $\$350.00 - \$339.50 = \$10.50;$   
3% cash discount.

6.  $\$800.00 - 10\% (\$80.00) = \$720.00;$   
 $\$720.00 - 10\% (\$72.00) = \$648.00;$   
 $\$648.00 - 5\% (\$32.40) = \$615.60;$   
 $\$615.60 - 2\% (\$12.30) = \$603.30.$

7.  $100\% - 20\% = 80\%;$   
 $80\% - 20\% (25\% \text{ of } 80\%) = 60\%;$   
 $60\% - 6\% (10\% \text{ of } 60\%) = 54\%;$   
 $100\% - 54\% = 46\%.$

Section 63.

Part 63a.

1-1	Article	Marked Price	Sold Price	Discount Amount	Percent
a.	Calculator	\$13.00	\$9.75	\$3.25	25%
b.	Radio	75.00	63.75	11.25	15%
c.	Shirts	40.00	33.00	7.00	$16\frac{2}{3}\%$
d.	Shoes	25.00	16.25	8.75	$33\frac{1}{3}\%$

1-2.  $\$165 - \$110 = \$55;$   
 $\$55 \div \$165 = 33\frac{1}{3}\%.$

1-3.  $\$27.50 - \$21.45 = \$6.05;$   
 $\$6.05 \div \$27.50 = 22\%.$



## Section 63.

Unit 14.

Part 63a - Review Assignment 63a.

Exercises 1-2 (for Part 63a),  
and Exercise 1 (for Review Assignment 63a).

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$$1-4. \quad \$70.00 - \$61.25 = \$8.75;$$

$$\$8.75 \div \$70.00 = 12.5\%.$$

$$1-5. \quad \$145.50 + \$4.50 = \$150.00;$$

$$\$4.50 \div \$150.00 = 3\%.$$

$$2-1. \quad 2 \times \$11.50 = \$23.00;$$

$$\$23.00 - \$20.70 = \$2.30;$$

$$\$2.30 \div \$23.00 = 10\%.$$

$$2-2. \quad 3 \times \$8.95 = \$26.85;$$

$$\$26.85 - \$17.90 = \$8.95;$$

$$\$8.95 \div \$26.85 = 33\frac{1}{3}\%.$$

$$2-3. \quad 3 \times \$8 = \$24; \quad 2 \times \$8 = \$16;$$

$$\$14 \div 2 = \$7; \quad 3 \times \$7 = \$21;$$

$$\$16 - \$14 = \$2; \quad \$24 - \$20 = \$4;$$

$$\$21 - \$20 = \$1.$$

a.  $\$2 \div \$16 = 12\frac{1}{2}\%.$

b.  $\$4 \div \$24 = 16\frac{2}{3}\%.$

$$2-4. \quad 2 \times \$0.25 = \$0.50;$$

$$\$0.25 + \$0.01 = \$0.26;$$

$$\$0.26 \div \$0.50 = 52\%.$$

- discount: (b) A reduction in a marked price.  
 markdown: (b) A reduction in a marked price.  
 marked price: (a) The price on an item or attached tag.  
 retail price: (a) The price on an item or attached tag.  
 sales price: (c) The price a customer pays.  
 selling price: (c) The price a customer pays.

## Unit 14

## Section 63.

## Review Assignment 63a.

## Exercises 2-8.

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Review Assignment  
63a (continued)

$$2. a. 34\frac{3}{8} \times 26 = \frac{275}{8} \times \frac{26}{1} = \frac{7,150}{8} = 893\frac{3}{4}$$

$$b. 63\frac{3}{8} \times 24\frac{2}{3} = \frac{507}{8} \times \frac{2437}{31} = \frac{6,253}{4} = 1,563\frac{1}{4}$$

c. Due date of 60-day note dated  
October 21: December 20.

$$d. 162\frac{1}{2}\% \text{ of } \$2.80 = \$4.55$$

$$e. \$600.00 \times 10\% (\$60.00) \text{ for 75 days} = \$12.50$$

$$3. \$175 - \$133 = \$42$$

$$\$42 \div \$175 = 24\%$$

$$4. \$900.00 - 2\% (\$18.00) = \$882.00;$$

$$\$882.00 \times 9\% (\$79.38) \text{ for 50 days} = \$11.23;$$

$$\$18.00 - \$11.23 = \$6.77$$

$$5. Portland firm: \$860.00 - 30\% (\$258.00) = \$602.00;$$

$$\$602.00 - 20\% (\$120.40) = \$481.60$$

$$\text{Portland firm: } \$860.00 - 25\% (\$215.00) = \$645.00;$$

$$\$645.00 - 20\% (\$129.00) = \$516.00;$$

$$\$516.00 - 10\% (\$51.60) = \$464.40;$$

$$\$464.40 + \$25.70 = \$490.10$$

$$\$490.10 - \$481.60 = \$8.50; \text{ Portland firm}$$

has the better offer.

$$6. 100\% - 20\% = 80\%; 80\% - 13\frac{1}{3}\% (16\frac{2}{3}\% \text{ of } 80\%) = 66\frac{2}{3}\%$$

$$66\frac{2}{3}\% - 6\frac{2}{3}\% = 60\%; 100\% - 60\% = 40\%$$

$$7. 0.6214 \text{ mi.} \times 100 = 62.14 \text{ mi.} = .1 \text{ km.}$$

$$8. \$36.00 \div 1\frac{1}{2}\% = \$2,400$$



## Section 63.

Unit 14.

## Part 63b.

## Exercises 3-4.

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3-1.	Article	Marked Price	Discount Allowed	Amount of Discount	Selling Price
a.	Table	\$70.00	12½%	\$8.75	\$61.25
b.	Calculator	15.50	30%	4.65	10.85
c.	Binoculars	69.50	20%	13.90	55.60
d.	Hair dryer	21.90	16⅔%	3.65	18.25
e.	Paintbrush	3.88	25%	.97	2.91
f.	Shirt	16.95	40%	6.78	10.17

3-2.  $\$19.75 \times 16\% = \$3.16;$   
 $\$19.75 - \$3.16 = \$16.59.$

3-3.  $\$60.00 \times 22\% = \$13.20;$   
 $\$60.00 - \$13.20 = \$46.80.$

3-4.  $\$189.90 \times 20\% = \$37.98;$   
 $\$189.90 - \$37.98 = \$151.92.$

3-5.  $\$17.95 \times 40\% = \$7.18;$   
 $\$17.95 - \$7.18 = \$10.77.$

4-1.  $100\% - 30\% = 70\%.$

4-2. a.  $100\% - 16\% = 84\%;$   
 b.  $\$63.00 \div 84\% = \$75.00.$

4-3. a.  $100\% - 15\% = 85\%.$   
 b.  $\$357.00 \div 85\% = \$420.00.$

4-4. a.  $100\% - 12\frac{1}{2}\% = 87\frac{1}{2}\%.$   
 b.  $\$16.52 \div 87\frac{1}{2}\% = \$18.88.$



Unit 14.

Section 63.

Part 63b - Review Assignment 63b.

Exercise 4 (for Part 63b),

and Exercises 1-6 (for Review Assignment 63b).

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Exercise 4  
(continued).

4-5.  $100\% - 25\% = 75\%;$   
 $\$142.50 \div 75\% = \$190.00.$

Review Assignment 63b.

1. a.  $16\frac{1}{2} \div 2\frac{3}{4} = \frac{33}{2} \times \frac{4}{11} = 6.$   
b.  $\$4.86$  is 35% more than  $\$3.60$   
c.  $\$1,450 \times 7\frac{1}{2}\%$  ( $\$108.75$ ) for 13 days  
=  $\$3.93.$   
d.  $\$1,200 \times 5\%$  ( $\$60.00$ ) for 154 days  
=  $\$25.60.$   
e.  $12\frac{1}{2} \text{ miles} \div \$1,000 = 0.0125.$

2.  $\$130.00 - \$91.00 = \$39.00;$   
 $\$39.00 \div \$130.00 = 30\%.$

3.  $\$1,343.20 - 2\%$  ( $\$26.86$ ) =  $\$1,316.34;$   
 $\$1,343.20 - 3\%$  ( $\$40.29$ ) =  $\$1,302.91;$   
 $\$1,316.34 - \$1,302.90 = \$13.44.$

4.  $\$35.00 - \$29.75 = \$5.25;$   
 $\$5.25 \div \$35.00 = 15\%.$

5. Grace Company:  $\$925.00 - 20\%$  ( $\$185.00$ ) =  $\$740.00;$   
 $\$740.00 - 10\%$  ( $\$74.00$ ) =  $\$666.00.$   
Tranger Bros.:  $\$950.00 - 30\%$  ( $\$285.00$ ) =  $\$665.00;$   
 $\$665.00 - 2\%$  ( $\$13.30$ ) =  $\$651.70.$

6.  $100\% - 20\% = 80\%;$   
 $80\% - 8\%$  (10% of 80%) =  $72\%;$   
 $72\% - 3.6\%$  (5% of 72%) =  $68.4\%.$

# Sections 63-64.

Unit 14.

Review Assignment 63b - Part 64a.

Exercises 7-10 (for Review Assignment 63.b),  
and Exercise 1 (for Part 64a).

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$$7. \$1,300.00 - \$130.00 = \$1,170.00;$$

$$10\% \text{ of } \$1,170.00 = \$117.00;$$

$$15\% \text{ of } \$1,170.00 = \$175.50;$$

$$\$1,170.00 + \$117.00 + \$175.50 = \$1,462.50;$$

$$\$1,462.50 \div 18 = \$81.25.$$

$$8. a. 15\frac{3}{4} \times 8\frac{2}{3} = \frac{63}{4} \times \frac{26}{3} = \frac{273}{2} = 136\frac{1}{2}.$$

$$b. \$19.20 \text{ increased by } \frac{3}{8} \text{ of itself equals } \$26.40.$$

$$9. \$21.63 + 2\frac{1}{2}\% = \$22.18.$$

$$10. \$58.50 - 10\% (\$5.85) = \$52.65.$$

## Section 64.

$$1-1. 60 + 40 = 100; 125 - 100 = 25.$$

$$\$1,285.00 + \$40.00 = \$1,325.00.$$

$$60 \times \$19.90 = \$1,194.00$$

$$40 \times 15.50 = 620.00$$

$$25 \times 11.00 = \underline{+ 275.00}$$

$$\$2,089.00$$

$$\$2,089.00 - \$1,325.00 = \$764.00.$$

$$-2. 40 \times 12 = 480; 480 - 380 = 100.$$

$$\$36.00 \times 40 = \$1,440.00; \$1,440 + \$30 = \$1,470.$$

$$380 \times \$6.95 = \$2,641.00$$

$$100 \times 4.95 = \underline{+ 495.00}$$

$$\$3,136.00$$

$$\$3,136.00 - \$1,470.00 = \$1,666.00.$$

## Unit 14.

## Section 64.

## Part 64a.

## Exercises 1-2.

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Exercise 1  
(continued).

$$\begin{aligned}
 1-3. \quad & \$62.00 - 35\% (\$21.70) = \$40.30; \\
 & \$40.30 + \$2.40 = \$42.70, \\
 & 12 \times \$5.95 = \$71.40; \\
 & \$71.40 - \$42.70 = \$28.70.
 \end{aligned}$$

$$\begin{aligned}
 1-4. \quad & 150 \times \$2.16 = \$324.00; \\
 & \$324.00 + \$2.40 = \$326.40, \\
 & 150 \times \$2.16 = \$324.00; \\
 & \$420.00 - \$326.40 = \$93.60.
 \end{aligned}$$

$$\begin{aligned}
 2-1. \quad & 24\% \text{ of } \$65.00 = \$15.60; \\
 & \$39.00 + \$15.60 = \$54.60; \\
 & \$65.00 - \$54.60 = \$10.40.
 \end{aligned}$$

$$\begin{aligned}
 2-2. \quad & 28\% \text{ of } \$825.00 = \$231.00; \\
 & \$495.00 + \$231.00 = \$726.00; \\
 & \$825.00 - \$726.00 = \$99.00.
 \end{aligned}$$

$$\begin{aligned}
 2-3. \quad & \$5,500 - \$4,550 = \$950; \\
 & \$1,150 - \$2,080 = \$-930.
 \end{aligned}$$

$$\begin{aligned}
 2-4. \quad & \$450.00 - 10\% (\$45.00) = \$405.00; \\
 & \$405.00 - 10\% (\$40.50) = \$364.50. \\
 & 15 \times \$25.00 = \$375.00 \\
 & 10 \times 20.50 = 205.00 \\
 & 5 \times 18.00 = + 90.00 \\
 & \quad \quad \quad \$670.00
 \end{aligned}$$

$$\begin{aligned}
 & \$670.00 - \$364.50 = \$305.50; \\
 & 35\% \text{ of } \$670.00 = \$234.50; \\
 & \$305.50 - \$234.50 = \$71.00.
 \end{aligned}$$



Section 64.

Unit 14.

Part 64a-Review Assignment 64a.

Exercise 2 (for Part 64a),  
and Exercises 1-4 (for Review Assignment 64a).

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$$\begin{aligned} 2-5. \quad & \$16.00 - 20\% (\$3.20) = \$12.80; \\ & \$12.80 - 10\% (\$1.28) = \$11.52; \\ & \$11.52 + \$0.68 = \$12.20; \\ & \$19.00 - \$12.20 = \$6.80; \\ & 25\% \text{ of } \$19.00 = \$4.75; \\ & \$6.80 - \$4.75 = \$2.05. \end{aligned}$$

$$\begin{aligned} 2-6. \quad & 300 \times \$2.40 = \$720.00; \\ & 290 \times \$4.00 = \$1,160.00; \\ & \$1,160.00 - \$720.00 = \$440.00; \\ & 25\% \text{ of } \$1,160.00 = \$290.00; \\ & \$440.00 - \$290.00 = \$150.00. \end{aligned}$$

1. a. Due date of 120-day note dated April 7: Aug. 5.

$$\begin{aligned} b. \quad & \$875.00 \times 9\% (\$78.75) \text{ for 70 days} \\ & = \$16.41. \end{aligned}$$

$$c. \quad \$8.25 \div 1,000 = 0.00825.$$

$$\begin{aligned} 2. \quad & \$385.00 - \$365.75 = \$19.25; \\ & \$19.25 \div \$385.00 = 5\%. \end{aligned}$$

$$\begin{aligned} 3. \quad & \$510.00 - \$382.50 = \$127.50; \\ & \$127.50 \div \$510.00 = 25\%. \end{aligned}$$

$$\begin{aligned} 4. \quad & \$15.45 - 20\% (\$3.09) = \$12.36; \\ & \$12.36 - 10\% (\$1.24) = \$11.12; \\ & 10 \times \$11.12 = \$111.20. \\ & \$15.45 - 2\% (\$0.31) = \$15.14. \end{aligned}$$

Unit 14.

Section 64.

Review Assignment 64a - Part 64b.

Exercises 5-8 (for Review Assignment 64a).

a. d. e. 1 (for Part 64b).

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Part 64a (continued)

5.  $30 \times 12 = 360$ ;  $180 + 120 = 300$ ;  $360 - 300 = 60$ .

$$180 \times \$7.50 = \$1,350.00$$

$$120 \times 5.50 = 660.00$$

$$60 \times 3.75 = + 225.00$$

$$\underline{\$2,235.00}$$

a.  $\$2,235.00 - \$1,497.00 = \$738.00$ .

b.  $\$738.00 \div 360 = \$2.05$ .

6. a.  $\begin{array}{r} 66L \\ -40L \\ \hline \end{array}$

b.  $\begin{array}{r} 16.86 \div 16.9 \\ 664 \overline{)11152} \\ \underline{400} \\ 715 \\ \underline{400} \\ 315 \\ \underline{320} \\ 52 \end{array}$

c.  $8\frac{1}{2} \times 4\frac{1}{2} =$

$7 \times \frac{1}{2} = 37$ .

b.  $\$7.20$  is  $\frac{15}{16}$  of  $\$7.68$ .

c.  $21\frac{3}{4}$  is  $1\frac{3}{4}$  times

$12\frac{1}{2}$ .

8.  $\$114.75 + 15\% = \$135.00$ .

Part 64b. 3-1.  $\$79.00 - \$47.40 = \$31.60$ ;

$\$31.60 \div \$79.00 = 40\%$ .

3-2.  $\$90.00 \div 12 = \$7.50$ ;

$\$11.25 - \$7.50 = \$3.75$ ;

$\$3.75 \div \$11.25 = 33\frac{1}{3}\%$ .

3-3. a.  $\$75.00 - \$48.75 = \$26.25$ ;

$\$26.25 \div \$75.00 = 35\%$ .

b. Less than.

c.  $37\frac{1}{2}\% - 35\% = 2\frac{1}{2}\%$ .



Section 64.  
Part 64b.  
Exercises 3-4.

Unit 14.

393

3-4.  $144 - 2 = 72$ ;  
 $72 \times \$10 = \$7.20$ ;  
 $\$7.20 - \$5.76 = \$1.44$ ;  
 $\$1.44 \div \$7.20 = 20\%$ .

3-5.  $\$80.00 - \$46.80 = \$33.20$ ;  
 $\$33.20 - 10\%(\$3.32) = \$29.88$ ;  
 $\$29.88 \div \$80.00 = 37\frac{7}{8}\%$ .

3-6.  $20 \times 40 = 800$ ;  $800 - 40 = 760$ ;  
 $20 \times \$7.60 = \$152.00$ ;  
 $\$152.00 - \$7.60 = \$144.00$ ;  
 $760 \div 4 = 190$ ;  $190 \times \$1.00 = \$190.00$ ;  
 $\$192.00 - \$144.00 = \$48.00$ ;  
 $\$48.00 \div \$192.00 = 25\%$ .

4-1.  $\$52.50 - \$34.65 = \$17.85$ ;  
 $26\% \text{ of } \$17.85 = \$4.64$ ;  
 $\$4.64 \div \$52.50 = 8.8\%$ .

4-2.  $\$16.00 - \$10.40 = \$5.60$ ;  
 $25\% \text{ of } \$5.60 = \$1.40$ ;  
 $\$1.40 \div \$16.00 = 8.75\%$ .

4-3.  $\$1,482.00 + \$292.50 = \$1,774.50$ ;  
 $\$1,950.00 - \$1,774.50 = \$175.50$ ;  
 $\$175.50 \div \$1,950.00 = 9\%$ .

4-4.  $\$2,600 - \$1,690 = \$910$ ;  
 $40\% \text{ of } \$2,600 = \$1,040$ ;  
 $\$910 \div \$1,040 = 8.75\% \text{ (net loss)}$ .



## Unit 14.

## Section 64.

Part 64b - Review Assignment 64b.

Exercise 4 (for Part 64b)

- 1 Exercise 1-5 (for Review Assignment 64b).

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Exercise 4  
(continued)

$$\begin{aligned}
 4-5. \quad 12 \times \$25.00 &= \$300.00; \\
 \$300.00 - \$192.00 &= \$108.00; \\
 19\% \text{ of } \$300.00 &= \$57.00; \\
 \$108.00 - \$57.00 &= \$51.00; \\
 \$51.00 \div \$300.00 &= 17\%.
 \end{aligned}$$

Review Assignment 64b.

$$1. a. 61\frac{1}{8} - 32\frac{3}{8} = 61\frac{1}{8} - 32\frac{6}{8} = 60\frac{4}{8} - 32\frac{6}{8} = 28\frac{3}{8}.$$

$$b. 2\frac{3}{4} \div 2\frac{1}{4} = \frac{201}{8} \times \frac{4}{2} = \frac{1514}{16} = 94\frac{7}{8}.$$

$$c. \text{ March 15 to July 1: } 108 \text{ days.}$$

$$d. \$1,375.00 \times 12\% (\$165.00) \text{ for 20 days} = \$9.17.$$

$$e. 150 \text{ m}^2 \times 125\% \text{ of } 120 \text{ m}^2.$$

$$2. \text{ October } 29 + 10 \text{ days} = \text{November } 8.$$

$$3. \$1.20 - \$0.90 = \$0.30;$$

$$\$0.30 \div \$1.20 = 25\%.$$

$$4. \$22.50 \div \$50.00 = \$12.50;$$

$$\$12.50 \div \$62.50 = 20\%.$$

$$5. \$250.00 - 20\% (\$50.00) = \$200.00;$$

$$\$200.00 - 10\% (\$20.00) = \$180.00;$$

$$\$180.00 - 5\% (\$9.00) = \$171.00.$$

$$\$300.00 - 15\% (\$45.00) = \$255.00.$$

$$\$255.00 - \$171.00 = \$84.00;$$

$$\$84.00 \div \$255.00 = 33\%.$$

Section 64.

Review Assignment 64B.

Exercises 6-10.

Unit 14.

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6. Quality Company:  $\$3,200 - 25\% (\$800) = \$2,400$ ;  
 $\$2,400 - 20\% (\$480) = \$1,920$ ;  
 $\$1,920 + \$105 = \$2,025$ .

Wayne Company:  $\$3,300 - 33\frac{1}{3}\% (\$1,100) = \$2,200$ ;  
 $\$2,200 - 10\% (\$220) = \$1,980$ .  
 $\$2,025 - \$1,980 = \$45$ ; Wayne Company has the better offer.

7.  $100\% - 25\% = 75\%$ ;  
 $75\% - 15\% (20\% \text{ of } 75\%) = 60\%$ ;  
 $60\% - 6\% (10\% \text{ of } 60\%) = 54\%$ ;  
 $100\% - 54\% = 46\%$ .

8.  $\$1,895.00 - 12\% (\$227.40) = \$1,667.60$ ;  
 $\$1,667.60 - 12\% (\$200.11) = \$1,467.49$ ;  
 $\$1,467.49 - 12\% (\$176.10) = \$1,291.39$ ;  
 $\$1,291.39 - 12\% (\$154.97) = \$1,136.42$ .

9. Insurance:  $\$ 546.00$   
Gas and oil:  $681.42$   
Registration fee:  $38.50$   
Inspection, repairs, and maintenance:  $+ 287.24$   
Total operating expenses:  $\$1,553.16$   
 $\$1,553.16 \div 12 = \$129.43$ .

10. a.  $60\% \times \$27.00 = \$16.20$ .  
b.  $60\% \times \$45.00 = \$27.00$ .  
c.  $160\% \times \$15.00 = \$24.00$ .

Unit 14:

Sections 64-65.

Review Assignment 64b - Part 65a.

Exercises 11-12 (for Review Assignment 64b),  
and Exercises 1-2 (for Part 65a).

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Review 2 exercises  
54b (continued)

11. a.  $12\frac{3}{8} \times 3\frac{1}{3} = \frac{99 \cdot 33}{84 \cdot 31} = \frac{165}{4} = 41\frac{1}{4}$

b.  $0.98\frac{1}{2} \times \$750.00 = \$738.75$

c. \$4.20 is  $\frac{5}{12}$  smaller than \$7.20.

12.  $\$9.72 \div 3\% = \$324.00$

### Section 65.

7-10

1-1.  $\$57.11 - 37\% (\$18.53) = \$38.58$

1-2.  $\$7.50 - 34\% (\$2.55) = \$4.95$

1-3.  $\$25.75 - 36\% (\$9.27) = \$16.48$

1-4.  $\$18.75 - 44\% (\$8.25) = \$10.50$

2-1.	Code Words	Repeater	Price				
			1	2	3	4	5
a.	TIMBERLAND 1234567890	None	\$1.50 TED	\$6.75 RLE	\$15.50 TEED	\$28.37 IAML	\$40.00 BDD
b.	BALTIMORES 1234567890	X	.93 EL	7.70 OXS	18.00 BRX	35.55 LISS	44.25 TXAI
c.	STRONG MILE 123456 7890	Y	1.13 SYR	3.95 RLN	.55 NY	60.60 GEGE	13.35 SRYN

2-2. GOLD PRINCE  
1 2 3 4 5 6 7 8 9 0

a. D L P  
4 3 5  
O R N  
c. 2 6 8  
e. G A L E  
f. 1 1 3 0  
g. L O A P  
3 2 2 5

A = repeat

b. I D E  
7 4 0  
d. G R A P  
1 6 6 5  
f. C E A  
9 0 0  
h. N I P  
8 7 5



Section 65.  
Review Assignment 65a.  
Exercises 1-7.

Unit 14.

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1. markup: (b) Difference between cost and selling price;  
gross profit.  
pricing goods: (a) Deciding what price to put on goods  
for sale.

2. a.  $22\frac{3}{4} - 56\frac{4}{5} = 22\frac{15}{20} - 56\frac{16}{20} = 220\frac{35}{20} - 56\frac{16}{20} = 164\frac{19}{20}$

b.  $7\frac{1}{8} \div 9\frac{1}{2} = \frac{57\frac{3}{4}}{84 \times \frac{21}{14}} = \frac{3}{4}$

c.  $\$565.00 \times 6\% (\$33.90) \text{ for 83 days}$   
 $= \$7.82$

3. BLACKSTONE      A KOE  
1 2 3 4 5 6 7 8 9 0      3 5 8 0

$\$59.75 - \$35.80 = \$23.95$

$\$23.95 \div \$59.75 = 40\%$

4.  $\$49.95 - 36\% (\$17.98) = \$31.97$

5.  $12 \times \$3.50 = \$42.00$

$\$42.00 - \$28.00 = \$14.00$

$\$14.00 \div \$42.00 = 33\frac{1}{3}\%$

6.  $\$8,500 - \$1,500 = \$7,000$

$\$7,000 \div 5 = \$1,400$

$3 \times \$1,400 = \$4,200$

$\$8,500 - \$4,200 = \$4,300$

7.  $\$1,340.00 - 3\% (\$40.20) = \$1,299.80$

$\$1,299.80 \times 10\% (\$129.98) \text{ for 80 days} = \$28.88$

$\$40.20 - \$28.88 = \$11.32$

## Unit 14

## Section 65.

Review Assignment 65a - Part 65b.

Exercises 8-9 (for Review Assignment 65a),  
and Exercise 3 (for Part 65b).

398

Review Assignment  
65a (continued).

$$8. \quad \$49.00 - \$26.95 = \$22.05;$$

$$35\% \text{ of } \$22.05 = \$7.72;$$

$$\$7.72 \div \$49.00 = 15.8\%.$$

$$9. \quad \$15.00 - \$9.00 = \$6.00;$$

$$\$6.00 \times 10 = \$60.00.$$

$$\$13.50 - \$9.00 = \$4.50;$$

$$\$4.50 \times 18 = \$81.00;$$

$$\$81.00 - \$21.00 = \$60.00;$$

$$\$21.00 \div \$81.00 = 26\%.$$

Part 65b	3-1.	Retailer's Cost	Markup Wanted	Retailer's Selling Price
	a.	\$15.51	45%	\$28.20
	b.	33.70	40%	56.50
	c.	10.53	35%	16.20
	d.	2.05	37½%	3.28
	e.	54.60	40%	91.00
	f.	7.56	33⅓%	11.34

$$3-2. \quad 100\% - 42\% = 58\%;$$

$$\$1.74 \div 58\% = \$3.00.$$

$$3-3. \quad 100\% - 40\% = 60\%;$$

$$\$4.74 \div 60\% = \$7.90.$$

$$3-4. \quad \$19,500 \div 1,500 = \$13.00;$$

$$100\% - 35\% = 65\%;$$

$$\$13.00 \div 65\% = \$20.00.$$



Section 65,

Unit 14.

Part 65b,

Exercises 3-4,

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3-5.  $\$80.00 - 25\% (\$20.00) = \$60.00;$   
 $\$60.00 - 10\% (\$6.00) = \$54.00;$   
 $100\% - 40\% = 60\%;$   
 $\$54.00 \div 60\% = \$90.00.$

3-6.  $100\% - 32\% = 68\%;$   
 $\$3.23 \div 68\% = \$4.75.$

4-1.	Retailer's Cost	Operating Expenses	Net Income Wanted	Retailer's Selling Price
a.	\$41.73	27%	8%	\$64.20
b.	5.34	25%	15%	8.90
c.	25.90	34%	10%	46.25
d.	20.15	24%	14%	32.50
e.	34.16	32%	12%	61.00

4-2.  $27\% + 7\% = 34\%;$   
 $100\% - 34\% = 66\%;$   
 $\$89.10 \div 66\% = \$135.00.$

4-3.  $20\% + 12\% = 32\%;$   
 $100\% - 32\% = 68\%;$   
 $\$119.00 \div 68\% = \$175.00.$

4-4.  $5\% + 25\% + 10\% = 40\%;$   
 $100\% - 40\% = 60\%;$   
 $\$210.00 \div 60\% = \$350.00.$

4-5.  $16\% + 10\% + 6\% = 32\%;$   
 $100\% - 32\% = 68\%;$   
 $\$289.00 \div 68\% = \$425.00.$



Unit 14.

Section 65.

Review Assignment 65b.

Exercises 1-6.

400

Review Assignment 65b.

1. a.  $3\frac{2}{3}\%$  of  $\$225.00 = \$8.25$ .  
b.  $\$39.15$  is  $145\%$  of  $\$27.00$ .  
c.  $\$37.80$  is  $30\%$  smaller than  $\$54.00$ .  
d.  $4\frac{5}{8} = 4.625$ .  
e.  $\$1,500.00 \times 8\% (\$120.00)$  for 60 days  
     $= \$20.00$ .  
f.  $\$216.00 = \$192.00$  increased by  $\frac{1}{8}$  of  
    itself.  
g.  $\$21.00$  decreased by  $\frac{1}{4}$  of itself equals  
     $\$16.80$ .

2.  $\$16.25 + 65\% (\$8.75) = \$25.00$ .

3.  $\$20.00 - 25\% (\$5.00) = \$15.00$ ;  
     $\$15.00 - 10\% (\$1.50) = \$13.50$ ;  
     $\$13.50 + \$.75 = \$14.25$ ;  
     $\$14.25 + 60\% (\$9.50) = \$23.75$ .

4.  $30\% + 10\% = 40\%$ ;  
     $100\% - 40\% = 60\%$ ;  
     $\$28.50 \div 60\% = \$47.50$ .

5. Total sale,  $\$34.45$ .  
    Sales tax,  $6\%$ .  
    Retail price,  $\$32.50$ .

6.  $\$781.00 - 5\% (\$39.00) = \$741.00$ .

Sections 65-66.

Unit 14.

Review Assignment 65b - Part 66a.

Exercises 7-9 (for Review Assignment 65b),  
and Exercise 1 (for Part 66a).

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7.  $\$4.25 - 12\% (\$.51) = \$3.74.$

8.  $\$32.05 - 2.5\% (\$.80) = \$31.25.$

Harry Craft  
Reconciliation Statement  
August 31, 1981

Checkbook balance: \$1,214.15	Bank statement balance: \$1,342.66
Add:	Less outstanding checks:
Deposit not recorded 49.00	#72 \$15.88
	#77 38.45
	#81 25.18
	<u>79.51</u>
Correct checkbook balance: \$1,263.15	Available bank balance: \$1,263.15

Section 66.

1-1.	Retailer's Cost	Retailer's Selling Price	Markup	Rate of Markup On Cost
a.	\$18.00	\$24.00	\$ 6.00	33 $\frac{1}{3}$ %
b.	25.75	33.99	8.24	32%
c.	18.80	25.85	7.05	37 $\frac{1}{2}$ %
d.	63.00	105.00	42.00	66 $\frac{2}{3}$ %

1-2.  $\$16.00 - \$12.00 = \$4.00;$   
 $\$4.00 \div \$12.00 = 33\frac{1}{3}\%.$



Unit 14. Section 66.  
Part 66a.  
Exercises 2-3.

702

2-1.	Retailer's Cost	Retailer's Selling Price	Markup	Rate of Markup	
				On Cost	On Selling Price
a.	\$ 7.50	\$ 9.00	\$ 1.50	20%	16 $\frac{2}{3}$ %
b.	5.00	7.50	2.50	50%	33 $\frac{1}{3}$ %
c.	12.00	15.00	3.00	25%	20%
d.	15.75	21.00	5.25	33 $\frac{1}{3}$ %	25%

2-2.  $\$2,250 - \$1,350 = \$900.$

a.  $\$900 \div \$1,350 = 66\frac{2}{3}\%.$

b.  $\$900 \div \$2,250 = 40\%.$

2-3.  $\$120.00 - 25\%(\$30.00) = \$90.00;$   
 $\$144.00 - \$90.00 = \$54.00.$

a.  $\$54.00 \div \$90.00 = 60\%.$

b.  $\$54.00 \div \$144.00 = 37\frac{1}{2}\%.$

2-4.  $\$60.00 - 33\frac{1}{3}\%(\$20.00) = \$40.00;$   
 $\$40.00 - 10\%(\$4.00) = \$36.00;$   
 $\$60.00 - 40\%(\$24.00) = \$36.00.$

2-5.  $\$120.00 - 20\%(\$24.00) = \$96.00;$   
 $\$96.00 - 10\%(\$9.60) = \$86.40;$   
 $\$120.00 - 10\%(\$12.00) = \$108.00;$   
 $\$108.00 - 20\%(\$21.60) = \$86.40.$

3-1.  $\$46.50 + \$2.75 = \$49.25;$   
 $\$49.25 + 52\%(\$25.61) = \$74.86.$



Section 66.

Unit 14.

Part 66a - Review Assignment 66a.

Exercise 3 (for Part 66a),

and Exercises 1-3 (for Review Assignment 66a).

403

$$\begin{aligned} 3-2. \quad & \$22.00 - 25\% (\$5.50) = \$16.50; \\ & \$16.50 - 10\% (\$1.65) = \$14.85; \\ & \$14.85 + \$1.75 = \$15.60; \\ & \$15.60 + 37.5\% (\$5.85) = \$21.45. \end{aligned}$$

$$\begin{aligned} 3-3. \quad & \$360.00 - 33\frac{1}{3}\% (\$120.00) = \$240.00; \\ & \$240.00 - 5\% (\$12.00) = \$228.00; \\ & \$228.00 + \$7.00 = \$235.00; \\ & \$235.00 + 40\% (\$94.00) = \$329.00. \end{aligned}$$

$$\begin{aligned} 3-4. \quad & 30 \times 12 = 360; \\ & \$12.18 \div 360 = \$0.03; \\ & 360 - 12 = 348; \\ & \$12.18 + 33\frac{1}{3}\% (\$4.06) = \$16.24; \\ & \$16.24 \div 348 = \$0.05. \end{aligned}$$

1. a. Due date of 75-day note dated May 13:

July 27.

b. \$6.97 is  $112\frac{1}{2}\%$  greater than \$3.28.

c. June 27 to November 9: 135 days.

d.  $\$625.00 \times 6\% (\$37.50)$  for 75 days  
= \$7.81.

$$\begin{aligned} 2. \quad & \$36.30 - \$22.00 = \$14.30; \\ & \$14.30 \div \$22.00 = 65\%; \end{aligned}$$

$$\begin{aligned} 3. \quad & \$29.55 + \$2.45 = \$32.00; \\ & \$20.64 + 55\% (\$11.35) = \$32.00. \end{aligned}$$

## Unit 14.

## Section 66.

Review Assignment 66a - Part 66b.

Exercises 4-8 (for Review Assignment 66a),  
and Exercise 4 (for Part 66b).

404

Review Assignment 66a (continued).

$$4. \quad \$119.50 - 15\% (\$17.93) = \$101.57;$$

$$\$101.57 - 10\% (\$10.16) = \$91.41;$$

$$\$91.41 - 2\% (\$1.83) = \$89.58.$$

$$5. \quad \$960.00 - 25\% (\$240.00) = \$720.00;$$

$$\$720.00 - 10\% (\$72.00) = \$648.00;$$

(Local dealer)

$$\$910.00 - 30\% (\$273.00) = \$637.00;$$

$$\$637.00 + \$26.25 = \$663.25,$$

(Out-of-town dealer)

$$\$663.25 - \$648.00 = \$15.25;$$

Local dealer has better offer.

$$6. \quad \$635.00 - \$615.95 = \$19.05;$$

$$\$19.05 \div \$635.00 = 3\%.$$

$$7. \quad \$15.68 + 36\% (\$5.64) = \$21.32.$$

$$8. \quad \$624.00 - 25\% (\$156.00) = \$468.00;$$

$$20\% + 8\% = 28\%;$$

$$100\% - 28\% = 72\%;$$

$$\$468.00 \div 72\% = \$650.00.$$

Part 66b.

4-1.	Markups on Selling Price	Markup on Cost
a.	25%	33 $\frac{1}{3}$ %
b.	40%	66 $\frac{2}{3}$ %
c.	45%	81.8%
d.	55%	122%
e.	39%	64%
f.	36%	56%



Section 66.

Part 66b, 1<sup>st</sup> Assignment 66b.

Exercises 4-5 (for Part 66b),

and Exercises 1-3 (for Review Assignment 66a).

Unit 14.

405

4-2.  $100\% - 40\% = 60\%;$   
 $40\% \div 60\% = 66\frac{2}{3}\%.$

4-3.  $100\% - 25\% = 75\%;$   
 $25\% \div 75\% = 33\frac{1}{3}\%.$

4-4.  $100\% - 37\frac{1}{2}\% = 62\frac{1}{2}\%;$   
 $37\frac{1}{2}\% \div 62\frac{1}{2}\% = 60\%.$

5-1.	Retailer's Selling Price	Markup Wanted	Highest Cost Price
a.	\$ 18.75	56%	\$ 12.02
b.	7.95	50%	5.30
c.	12.96	60%	8.10
d.	26.60	52%	17.50
e.	75.95	55%	49.00
f.	11.89	64%	7.25

5-2.  $100\% + 62\% = 162\%;$   
 $\$47.79 \div 162\% = \$29.50.$

5-3.  $100\% + 65\% = 165\%;$   
 $\$14.85 \div 165\% = \$9.00.$

5-4.  $100\% + 70\% = 170\%;$   
 $\$89.25 \div 170\% = \$52.50.$

5-5.  $100\% + 55\% = 155\%;$   
 $\$5.89 \div 155\% = \$3.80.$



Unit 14.

Section 66.

Review Assignment 66b.

Exercises 1-8.

706

Review Assignment  
66b.

$$\begin{aligned}
 1. \quad & \$7.00 \times 12 = \$84.00; \\
 & \$84.00 - \$50.00 = \$34.00; \\
 & \$34.00 \div \$50.00 = 68\%; \\
 & 100\% - 68\% = 32\%.
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & \$36.00 + \$2.00 = \$38.00; \\
 & \$38.00 + 62\frac{1}{2}\% (\$23.75) = \$61.75.
 \end{aligned}$$

$$\begin{aligned}
 3. \quad & \$123.50 - \$98.80 = \$24.70; \\
 & \$24.70 \div \$123.50 = 20\%,
 \end{aligned}$$

$$\begin{aligned}
 4. \quad & \$75.20 - \$62.50 = \$12.70; \\
 & \$12.70 \div \$75.20 = 16.9\%.
 \end{aligned}$$

$$\begin{aligned}
 5. \quad & 100\% - 20\% = 80\%; \\
 & 80\% - 10\% (12\frac{1}{2}\% \text{ of } 80\%) = 70\%; \\
 & 70\% - 3\frac{1}{2}\% (5\% \text{ of } 70\%) = 66\frac{1}{2}\%.
 \end{aligned}$$

$$\begin{aligned}
 6. \quad & \text{CUMBERLAND} \\
 & \text{1 2 3 4 5 6 7 8 9 0} \\
 a. \quad & \$14.49 = \text{CBXN.} \\
 b. \quad & \text{UDEX} = \$20.55.
 \end{aligned}$$

$$\begin{aligned}
 7. \quad & \$568.75 - 2\% (\$11.37) = \$557.38. \\
 & \text{April 22 to May 5: 13 days (2/30),}
 \end{aligned}$$

$$\begin{aligned}
 8. \quad & \$2.50 \times 12 = \$30.00; \\
 & \$30.00 - \$18.00 = \$12.00. \\
 a. \quad & \$12.00 \div \$18.00 = 66\frac{2}{3}\%. \\
 b. \quad & \$18.00 \times 15 = \$270.00; \\
 & \$30.00 \times 15 = \$450.00; \\
 & \$450.00 - \$270.00 = \$180.00.
 \end{aligned}$$

Section 66.

Review Assignment 66b--General Review.

Exercises 9-10 (for Review Assignment 66b),  
and Exercises 1-2 (for General Review).

Unit 14.

407

9.  $100\% - 22\% = 78\%;$   
 $22\% \div 78\% = 28.2\%.$

10.  $\$24.00 + 60\% = \$40.00.$

1. a.  $3\frac{5}{16} = 3\frac{5}{16}$       b.  $15\frac{5}{12} = 15\frac{14}{12}$   
 $6\frac{1}{8} = 6\frac{2}{16}$        $- 8\frac{2}{3} = -8\frac{8}{12}$   
 $15\frac{3}{4} = 15\frac{12}{16}$        $6\frac{9}{12} = 6\frac{3}{4}$   
 $+ 4\frac{1}{2} = + 4\frac{8}{16}$   
 $28\frac{27}{16} = 29\frac{11}{16}$

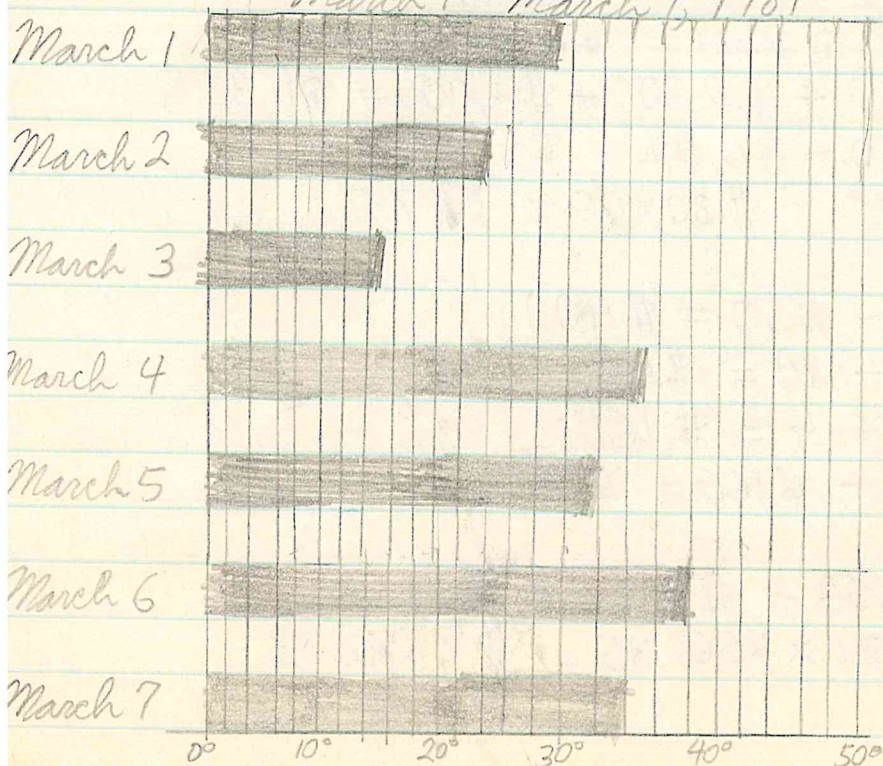
c.  $11\frac{2}{3} \div 1\frac{3}{4} = \frac{35}{3} \times \frac{4}{7} = \frac{20}{3} = 6\frac{2}{3}.$

d.  $44\frac{1}{2} \times 6\frac{1}{4} = \frac{89}{2} \times \frac{25}{4} = \frac{2225}{8} = 278\frac{1}{8}.$

e.  $\frac{8}{11} = .73.$

f. 60.5 kilometers per hour increased by 20%  
= 72.6 kilometers.

2. Average Daily Temperature  
March 1 - March 7, 1981





## Unit 14.

Section 66.  
General Review  
Exercises 3-8.

408

General Review  
(continued).

3.	\$5.00	\$5.00	\$7.50	\$22.30	\$238.50 <sup>14 10</sup>
	$\times 40$	$\times 15$	$\times 5$	$+14.56$	$-36.86$
	\$200.00	2500	\$37.50	\$36.86	\$200.64
		500	+200.00		
		\$7500	\$237.50		

Withholding tax (3 withholding allowances): \$22.30.  
FICA tax: \$14.56.

4.  $\$7,200.00 - \$1,800.00 = \$5,400.00$ ;  
 $\$5,400.00 \times 16\% = \$864.00$ ;  
 $\$5,400.00 + \$864.00 = \$6,264.00$ ;  
 $\$6,264.00 \div 24 = \$261.00$ .

5.  $200 \times \$1.50 = \$300.00$ ;  
 $\$7,065.00 + \$300.00 = \$7,365.00$ ;  
 $\$7,365.00 - \$6,715.86 = \$649.14$  (loss).

6.  $\$40,000 - \$10,000 = \$30,000$ ;  
 $10\% \text{ of } \$30,000 = \$3,000$ ;  
 $24 \times \$250 = \$6,000$ ;  
 $\$6,000 + \$2,300 + \$3,000 = \$11,300$ ;  
 $\$11,300 - \$6,000 = \$5,300$ ;  
 $\$5,300 \div \$30,000 = 17.7\%$ .

7.  $\$450 - \$50 = \$400$ ;  
 $\$400 \div 10 = \$40$ ;  
 $\$40 \times 4 = \$160$ ;  
 $\$450 - \$160 = \$290$ .

8.  $\$13,500 \div \$1,000 = \$13.50$ ;  
 $\$13.50 \times \$568.35 = \$7,672.73$ .



Section 66.  
General Review:  
Exercises 9-13.

Unit 14.

409

9.  $\$1,776,420 \div \$21,300,000 = 0.0834;$   
 $\$21,300,000 \div \$100 = \$213,000;$   
 $\$213,000 \times 0.0834 = \$17,764.20.$

10.  $47,400 - 39,800 = 7,600;$   
 $7,600 \div 1,000 = 7.6;$   
 $\$2.15 \times 7.6 = \$16.34;$   
 $\$16.34 + 4\% (\$.65) = \$16.99.$

11. Depreciation (20% of  $\$5,700$ ) =  $\$1,140.00$   
Interest (9% of  $\$5,700$ ) =  $513.00$   
Miscellaneous expenses =  $+1,080.00$   
Total operating expenses =  $\$2,733.00$   
 $\$2,733.00 \div 12,500 \text{ miles} = \$.22.$

12.  $\$2,690.00 \times 2\% = \$53.80;$   
 $\$160.00 + \$53.80 = \$213.80.$

13.  $950 \times \$ .18 = \$171.00$   
 $5 \times \$18.00 = 90.00$   
 $50 \times \$ .80 = 40.00$   
 $+ 4.00$   
 $\$305.00$

Unit 14. Section 66.  
General Review  
Exercises 14-18.

410

General Review  
(continued).

14.

Ralph Kilmer Reconciliation Statement July 31, 1981	
Checkbook balance: \$1,142.31	Bank statement balance: \$1,147.85
Subtract: 35.00	Less outstanding checks:
	#134 \$27.82
	#141 19.55
	#144 33.18
	80.55
	Sub-total: \$1,067.31
	Add: Deposit not recorded 40.00
Correct checkbook balance: \$1,107.31	Bank balance: \$1,107.31

15.  $\$62.00 \div 8\% = \$775.00.$

16.

An Account with Lucille King				
Date	Withdrawal	Deposit	Interest	Balance
1981 Apr. 1		\$500.00		\$500.00
July 1		350.00	\$12.75	862.75
Oct. 1			12.94	875.69

6% interest a year

a.  $\$875.69.$

b.  $\$12.75 + \$12.94 = \$25.69.$

17. Total sales,  $\$98.80.$

Less Tax (4%),  $\$3.80.$

Net price,  $\$95.00.$

18.  $100\% - 36\% = 64\%;$

$\$64.80 \times 64\% = \$41.47;$

$100\% - 10\% = 90\%;$

$\$41.47 \div 90\% = \$46.08.$



Section 67a  
Part 67a.  
Exercises 1-2.

Unit 15.

Unit 15, Section 67.

411

$$\begin{array}{rcl} 1-1. & 20 \times \$6.25 = & \$125.00 \\ & 120 \times .70 = & 84.00 \\ & 75 \times 2.40 = & 180.00 \\ & & \underline{\$389.00} \end{array}$$

$$\$389.00 - 20\% (\$77.80) = \$311.20;$$

$$\$311.20 - 10\% (\$31.12) = \$280.08;$$

$$\$280.08 + \$12.52 = \$292.60.$$

All extensions, trade discounts, and other invoices are correct.

$$1-2. \$280.08 - 2\% (\$5.60) = \$274.48.$$

2-1. Name: J. R. Klein

Address: 316 Cord Avenue  
Fargo, ND 58102

Date	Explanation	Charges	Credits	Balance
1981 June 1	Balance			\$ 357.80
12	30 days	\$ 185.40		543.20
15	Return		\$ 30.00	513.20
20			357.80	155.40
26	30 days	275.00		430.40
July 10			155.40	275.00
12	30 days	216.00		491.00
15	Return		20.00	471.00



Unit 15.

Section 67.

Part 67a-Review Assignment 67a.

Exercise 2 (for Part 67a),

and Exercises 1-5 (for Review Assignment 67a).

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Exercise 2  
(continued).

2-2. Name: B. L. Clark

Address: 16 Trust Avenue  
Liberty, PA 16930

Date	Explanation	Charges	Credits	Balance
1981 May 1	Balance			\$ 166.38
3			\$ 166.38	
12	2/10, n/30	\$264.52		264.52
20	2/10, n/30	127.84		392.36
22			264.52	127.84
25	Return		21.72	106.12
29	Return		106.12	

Review Assignment 67a.

- customer's account: (2) Shows how much a buyer owes.  
sales invoice: (a) Describes goods sold and shipped.

- April 2 to September 15: 166 days.
  - $\$775.00 \times 7\% (\$54.25)$  for 60 days  
= \$9.04.

$$3. \quad \$21.00 - \$13.65 = \$7.35;$$

$$\$7.35 \div \$21.00 = 35\%.$$

$$4. \quad \$8,700 \div \$100 = \$87;$$

$$\$87.00 \times \$5.2631 = \$457.89.$$

$$5. \quad \$30.00 - \$26.25 = \$3.75;$$

$$\$3.75 \div \$30.00 = 12\frac{1}{2}\%.$$

## Section 67.

Unit 15.

Review Assignment 67a - Part 67b.

Exercises 6-7 (for Review Assignment 67a),  
and Exercises 34 (for Part 67b).

413

$$6. \quad 100\% - 40\% = 60\%;$$

$$40\% - 60\% = 66\frac{2}{3}\%.$$

$$7. \quad \$79.50 + 25\% = \$106.00.$$

$$3-1. \quad a. \quad 25 = \frac{1}{4} \text{ of } 100;$$

$$\frac{1}{4} \text{ of } \$ .36 = \$ .09;$$

$$100 \times \$ .09 = \$9.00.$$

$$c. \quad 75 = \frac{3}{4} \text{ of } 100;$$

$$\frac{3}{4} \text{ of } \$ .16 = \$ .12;$$

$$100 \times \$ .12 = \$12.00.$$

$$e. \quad 75 = \frac{3}{4} \text{ of } 100;$$

$$\frac{3}{4} \text{ of } \$ .32 = \$ .24;$$

$$100 \times \$ .24 = \$24.00.$$

$$b. \quad 50 = \frac{1}{2} \text{ of } 100;$$

$$\frac{1}{2} \text{ of } \$ .64 = \$ .32;$$

$$100 \times \$ .32 = \$32.00.$$

$$d. \quad 25 = \frac{1}{4} \text{ of } 100;$$

$$\frac{1}{4} \text{ of } \$ .96 = \$ .24;$$

$$100 \times \$ .24 = \$24.00.$$

$$f. \quad 40 = \frac{2}{5} \text{ of } 100;$$

$$\frac{2}{5} \text{ of } \$ .55 = \$ .22;$$

$$100 \times \$ .22 = \$22.00.$$

$$2. \quad a. \quad 12\frac{1}{2} = \frac{1}{8} \text{ of } 100;$$

$$\frac{1}{8} \text{ of } \$ .64 = \$ .08;$$

$$100 \times \$ .08 = \$8.00.$$

$$c. \quad 12\frac{1}{2} = \frac{1}{8} \text{ of } 100;$$

$$\frac{1}{8} \text{ of } \$ .32 = \$ .04;$$

$$100 \times \$ .04 = \$4.00.$$

$$e. \quad 37\frac{1}{2} = \frac{3}{8} \text{ of } 100;$$

$$\frac{3}{8} \text{ of } \$ .56 = \$ .24;$$

$$100 \times \$ .24 = \$24.00.$$

$$b. \quad 37\frac{1}{2} = \frac{3}{8} \text{ of } 100;$$

$$\frac{3}{8} \text{ of } \$ .40 = \$ .15;$$

$$100 \times \$ .15 = \$15.00.$$

$$d. \quad 62\frac{1}{2} = \frac{5}{8} \text{ of } 100;$$

$$\frac{5}{8} \text{ of } \$ .72 = \$ .45;$$

$$100 \times \$ .45 = \$45.00.$$

$$f. \quad 60 = \frac{3}{5} \text{ of } 100;$$

$$\frac{3}{5} \times \$ .25 = \$ .15;$$

$$100 \times \$ .15 = \$15.00.$$

$$3. \quad a. \quad 87\frac{1}{2} = \frac{7}{8} \text{ of } 100;$$

$$\frac{7}{8} \text{ of } \$ .80 = \$ .70;$$

$$100 \times \$ .70 = \$70.00.$$

$$b. \quad 33\frac{1}{3} = \frac{1}{3} \text{ of } 100;$$

$$\frac{1}{3} \text{ of } \$ .66 = \$ .22;$$

$$100 \times \$ .22 = \$22.00.$$

$$c. \quad 66\frac{2}{3} = \frac{2}{3} \text{ of } 100;$$

$$\frac{2}{3} \text{ of } \$ .24 = \$ .16;$$

$$100 \times \$ .16 = \$16.00.$$

$$d. \quad 87\frac{1}{2} = \frac{7}{8} \text{ of } 100;$$

$$\frac{7}{8} \text{ of } \$ .64 = \$ .56;$$

$$100 \times \$ .56 = \$56.00.$$

$$e. \quad 33\frac{1}{3} = \frac{1}{3} \text{ of } 100;$$

$$\frac{1}{3} \text{ of } \$ .39 = \$ .13;$$

$$100 \times \$ .13 = \$13.00.$$

$$f. \quad 20 = \frac{1}{5} \text{ of } 100;$$

$$\frac{1}{5} \text{ of } \$ .45 = \$ .09;$$

$$100 \times \$ .09 = \$9.00.$$



## Unit 15.

## Section 67.

## Part 67b

## Exercises 3-4.

414

Exercise 3.  
(continued)

$$3-4. a. 16\frac{2}{3} = \frac{1}{6} \text{ of } 100;$$

$$\frac{1}{6} \text{ of } \$1.80 = \$ .30;$$

$$100 \times \$ .30 = \$30.00.$$

$$c. 66\frac{2}{3} = \frac{2}{3} \text{ of } 100;$$

$$\frac{2}{3} \text{ of } \$ .45 = \$ .30;$$

$$100 \times \$ .30 = \$30.00.$$

$$e. 16\frac{2}{3} = \frac{1}{6} \text{ of } 100;$$

$$\frac{1}{6} \text{ of } \$1.26 = \$ .21;$$

$$100 \times \$ .21 = \$21.00.$$

$$b. 83\frac{1}{3} = \frac{5}{6} \text{ of } 100;$$

$$\frac{5}{6} \text{ of } \$ .18 = \$ .15;$$

$$100 \times \$ .15 = \$15.00.$$

$$d. 83\frac{1}{3} = \frac{5}{6} \text{ of } 100;$$

$$\frac{5}{6} \text{ of } \$ .54 = \$ .45;$$

$$100 \times \$ .45 = \$45.00.$$

$$f. 80 = \frac{4}{5} \text{ of } 100;$$

$$\frac{4}{5} \text{ of } \$ .15 = \$ .12;$$

$$100 \times \$ .12 = \$12.00.$$

$$4-1. a. 25 = \frac{1}{4} \text{ of } 100;$$

$$100 \times \$2.80 = \$280.00;$$

$$\frac{1}{4} \text{ of } \$280.00 = \$70.00.$$

$$c. 87\frac{1}{2} = \frac{7}{8} \text{ of } 100;$$

$$100 \times \$ .32 = \$32.00;$$

$$\frac{7}{8} \text{ of } \$32.00 = \$28.00.$$

$$e. 75 = \frac{3}{4} \text{ of } 100;$$

$$100 \times \$ .44 = \$44.00;$$

$$\frac{3}{4} \text{ of } \$44.00 = \$33.00.$$

$$b. 62\frac{1}{2} = \frac{5}{8} \text{ of } 100;$$

$$100 \times \$ .88 = \$88.00;$$

$$\frac{5}{8} \text{ of } \$88.00 = \$55.00.$$

$$d. 33\frac{1}{3} = \frac{1}{3} \text{ of } 100;$$

$$100 \times \$ .45 = \$45.00;$$

$$\frac{1}{3} \text{ of } \$45.00 = \$15.00.$$

$$f. 80 = \frac{4}{5} \text{ of } 100;$$

$$100 \times \$ .35 = \$35.00;$$

$$\frac{4}{5} \text{ of } \$35.00 = \$28.00.$$

$$4-2. a. 16\frac{2}{3} = \frac{1}{6} \text{ of } 100;$$

$$100 \times \$ .72 = \$72.00;$$

$$\frac{1}{6} \text{ of } \$72.00 = \$12.00.$$

$$c. 83\frac{1}{3} = \frac{5}{6} \text{ of } 100;$$

$$100 \times \$ .42 = \$42.00;$$

$$\frac{5}{6} \text{ of } \$42.00 = \$35.00.$$

$$e. 66\frac{2}{3} = \frac{2}{3} \text{ of } 100;$$

$$100 \times \$ .60 = \$60.00;$$

$$\frac{2}{3} \text{ of } \$60.00 = \$40.00.$$

$$b. 50 = \frac{1}{2} \text{ of } 100;$$

$$100 \times \$2.46 = \$246.00;$$

$$\frac{1}{2} \text{ of } \$246.00 = \$123.00.$$

$$d. 37\frac{1}{2} = \frac{3}{8} \text{ of } 100;$$

$$100 \times \$ .64 = \$64.00;$$

$$\frac{3}{8} \text{ of } \$64.00 = \$24.00.$$

$$f. 20 = \frac{1}{5} \text{ of } 100;$$

$$100 \times \$1.50 = \$150.00;$$

$$\frac{1}{5} \text{ of } \$150.00 = \$30.00.$$

$$4-3. a. 12\frac{1}{2} = \frac{1}{8} \text{ of } 100;$$

$$100 \times \$ .96 = \$9.60;$$

$$\frac{1}{8} \text{ of } \$9.60 = \$1.20.$$

$$b. 25 = \frac{1}{4} \text{ of } 100;$$

$$100 \times \$1.28 = \$128.00;$$

$$\frac{1}{4} \times \$128.00 = \$32.00.$$



Section 67.  
Part 67b.  
Exercises 4-5.

Unit 15.

415

c.  $66\frac{2}{3} = \frac{2}{3}$  of 100;

$100 \times \$ .24 = \$24.00;$

$\frac{2}{3}$  of  $\$24.00 = \$16.00;$

e.  $50 = \frac{1}{2}$  of 100;

$100 \times \$1.88 = \$188.00;$

$\frac{1}{2}$  of  $\$188.00 = \$94.00;$

4-4. a.  $12\frac{1}{2} = \frac{1}{8}$  of 100;

$100 \times \$ .72 = \$72.00;$

$\frac{1}{8} \times \$72.00 = \$9.00.$

c.  $87\frac{1}{2} = \frac{7}{8}$  of 100;

$100 \times \$ .40 = \$40.00;$

$\frac{7}{8} \times \$40.00 = \$35.00.$

e.  $37\frac{1}{2} = \frac{3}{8}$  of 100;

$100 \times \$ .32 = \$32.00;$

$\frac{3}{8} \times \$32.00 = \$12.00.$

d.  $62\frac{1}{2} = \frac{5}{8}$  of 100;

$100 \times \$ .56 = \$56.00;$

$\frac{5}{8} \times \$56.00 = \$35.00.$

f.  $40 = \frac{2}{5}$  of 100;

$100 \times \$ .15 = \$15.00;$

$\frac{2}{5}$  of  $\$15.00 = \$6.00.$

b.  $33\frac{1}{3} = \frac{1}{3}$  of 100;

$100 \times \$ .69 = \$69.00;$

$\frac{1}{3}$  of  $\$69.00 = \$23.00.$

d.  $75 = \frac{3}{4}$  of 100;

$100 \times \$ .48 = \$48.00;$

$\frac{3}{4}$  of  $\$48.00 = \$36.00.$

f.  $60 = \frac{3}{5}$  of 100;

$100 \times \$ .60 = \$60.00;$

$\frac{3}{5} \times \$60.00 = \$36.00.$

5-1. a.  $125 = 100 + \frac{1}{4}$  of 100;

$100 \times \$ .24 = \$24.00;$

$\frac{1}{4} \times \$24.00 = \$6.00;$

$\$24.00 + \$6.00 = \$30.00.$

c.  $175 = 100 + \frac{3}{4}$  of 100;

$100 \times \$ .16 = \$16.00;$

$\frac{3}{4} \times \$16.00 = \$12.00;$

$\$16.00 + \$12.00 = \$28.00.$

e.  $150 = 100 + \frac{1}{2}$  of 100;

$100 \times \$ .42 = \$42.00;$

$\frac{1}{2} \times \$42.00 = \$21.00;$

$\$42.00 + \$21.00 = \$63.00.$

g.  $250 = 100 + \frac{3}{2}$  of 100;

$100 \times \$ .16 = \$16.00;$

$\frac{3}{2} \times \$16.00 = \$24.00;$

$\$16.00 + \$24.00 = \$40.00.$

b.  $150 = 100 + \frac{1}{2}$  of 100;

$100 \times \$ .22 = \$22.00;$

$\frac{1}{2} \times \$22.00 = \$11.00;$

$\$22.00 + \$11.00 = \$33.00.$

d.  $250 = 100 + \frac{3}{2}$  of 100;

$100 \times \$ .14 = \$14.00;$

$\frac{3}{2} \times \$14.00 = \$21.00;$

$\$14.00 + \$21.00 = \$35.00.$

f.  $125 = 100 + \frac{1}{4}$  of 100;

$100 \times \$ .32 = \$32.00;$

$\frac{1}{4} \times \$32.00 = \$8.00;$

$\$32.00 + \$8.00 = \$40.00.$

h.  $175 = 100 + \frac{3}{4}$  of 100;

$100 \times \$ .44 = \$44.00;$

$\frac{3}{4} \times \$44.00 = \$33.00;$

$\$44.00 + \$33.00 = \$77.00.$

## Unit 15.

## Section 67.

## Part 67.b - Review Assignment 67.b.

## Exercise 5 (for Part 67.b),

## and Exercises 1-3 (for Review Assignment 67.b).

416

Exercise 5  
(continued).

5-2. a.  $250 = 100 + \frac{3}{2}$  of 100;

$100 \times \$12 = \$12.00;$

$\frac{3}{2} \times \$12.00 = \$18.00;$

$\$12.00 + \$18.00 = \$30.00.$

c.  $125 = 100 + \frac{1}{4}$  of 100;

$100 \times \$28 = \$28.00;$

$\frac{1}{4} \times \$28.00 = \$7.00;$

$\$28.00 + \$7.00 = \$35.00.$

e.  $125 = 100 + \frac{1}{4}$  of 100;

$100 \times \$4.40 = \$440.00;$

$\frac{1}{4}$  of  $\$440.00 = \$110.00;$

$\$440.00 + \$110.00 = \$550.00.$

g.  $150 = 100 + \frac{1}{2}$  of 100;

$100 \times \$6.10 = \$610.00;$

$\frac{1}{2}$  of  $\$610.00 = \$305.00;$

$\$610.00 + \$305.00 = \$915.00.$

b.  $150 = 100 + \frac{1}{2}$  of 100;

$100 \times \$2.50 = \$250.00;$

$\frac{1}{2} \times \$250.00 = \$125.00;$

$\$250.00 + \$125.00 = \$375.00.$

d.  $150 = 100 + \frac{1}{2}$  of 100;

$100 \times \$4.50 = \$450.00;$

$\frac{1}{2} \times \$450.00 = \$225.00;$

$\$450.00 + \$225.00 = \$675.00.$

f.  $250 = 100 + \frac{3}{2}$  of 100;

$100 \times \$1.20 = \$120.00;$

$\frac{3}{2}$  of  $\$120.00 = \$180.00;$

$\$120.00 + \$180.00 = \$300.00.$

h.  $125 = 100 + \frac{1}{4}$  of 100;

$100 \times \$1.60 = \$160.00;$

$\frac{1}{4}$  of  $\$160.00 = \$40.00;$

$\$160.00 + \$40.00 = \$200.00.$

Part 67.b  
Exercise 5

1. a. Due date of 90-day note dated May 29: August 27.

b. March 15 to July 20: 127 days

c.  $\$740.00 \times 8\% (\$59.20)$  for 120 days =  $\$19.73.$

2.  $\$17.50 - 33\frac{1}{3}\% (\$5.83) = \$11.67;$

$\$11.67 - 10\% (\$1.17) = \$10.50.$

$\$17.50 - 10\% (\$1.75) = \$15.75;$

$\$10.50 \div \$15.75 = 66\frac{2}{3}\%;$

$100\% - 66\frac{2}{3}\% = 33\frac{1}{3}\%.$

3.  $\$.60 \times 48 = \$28.80;$

$\$17.28 \div \$28.80 = 60\%;$

$100\% - 60\% = 40\%.$



Sections 67-68.

Unit 15.

Review Assignment 67b - Part 68a + Part 68b.

Exercises 4-5 (for Review Assignment 67b),

Exercise 1 (for Part 68a),

and Exercise 2 (for Part 68b).

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4.  $3 \times 12 = 36$ ;  $\$15.12 \times 36 = \$544.32$ ;  
 $\$544.32 - \$15.12 = \$529.20$ ;  
 $\$529.20 \div \$15.12 = 35\frac{1}{3}\%$ .

5.  $100\% - 60\% = 40\%$ .

### Section 68.

1-1.  $\$2,400.00 \times 9\% = \$216.00$ ;  
 $360 \div 60 = 6$ ;  $\$216.00 \div 6 = \$36.00$ ;  
 $\$2,400.00 + \$36.00 = \$2,436.00$ .

2.  $\$600.00 \times 10\% = \$60.00$ ;  
 $360 \div 30 = 12$ ;  $\$60.00 \div 12 = \$5.00$ ;  
 $\$600.00 + \$5.00 = \$605.00$ ;  
 $\$3,000.00 - \$605.00 = \$2,395.00$ .

3.  $\$1,000.00 \times 8\% = \$80.00$ ;  
 $360 \div 90 = 4$ ;  $\$80.00 \div 4 = \$20.00$ ;  
 $\$1,000.00 + \$20.00 = \$1,020.00$ ;  
 $\$1,980.00 - \$1,020.00 = \$960.00$ .

4.  $\$300.00 \times 9\% = \$27.00$ ;  
 $360 \div 30 = 12$ ;  $\$27.00 \div 12 = \$2.25$ ;  
 $\$300.00 + \$2.25 = \$302.25$ .

1.	Face	Date of Note	Time of Note	Discount Rate	Proceeds
2.	\$2,400	Aug. 16	60 days	9%	\$2,364
3.	3,000	Apr. 22	120 days	8%	2,920
4.	800	Oct. 4*	90 days	10%	780
5.	3,600	Mar. 5	30 days	10%	3,570

\*That's when Rhonda Fleming took her shoes off - twice!





# Section 68.

Unit 15.

Review Assignment 68b - Part 68c.

Exercises 4-8 (for Review Assignment 68b) and Exercise 3 (for Part 68c).

419

4. a.  $\$1,800.00 \times 9\% = \$162.00$ ;  
 $360 \div 30 = 12$ ;  $\$162.00 \div 12 = \$13.50$ .  
 b.  $\$1,800.00 - \$13.50 = \$1,786.50$ .

5.  $144 \times \$1.15 = \$21.60$ ;  
 $\$14.40 \div \$21.60 = 66\frac{2}{3}\%$ ;  
 $100\% - 66\frac{2}{3}\% = 33\frac{1}{3}\%$ .

6.  $\$25.50 - \$15.00 = \$10.50$ ; 70% profit.  
 $\$17.50 + 70\% \text{ profit} = \$29.75$ .

7.  $100\% - 45\% = 55\%$ ;  
 $45\% \div 55\% = 81.8\%$ .

8.  $\$9.00 - 20\% (\$1.80) = \$7.20$ ;  
 $\$7.20 - 10\% (\$.72) = \$6.48$ ;  
 $\$6.48 + \$.17 = \$6.65$ ;  
 $\$6.65 + 30\% \text{ profit} = \$8.65$ .

-1.	Face	Date of Note	Time of Note	Discount Date	Discount Rate	Proceeds
1.	\$ 900	Mar. 29	45 days	Apr. 3	8%	\$ 892.00
2.	3,000	June 23	90 days	July 23	9%	2,910.00
3.	1,000	Aug. 12	90 days	Aug. 12	10%	998.89
4.	1,500	Sept. 5	3 mos.	Oct. 6	9%	1,477.50

2. October 21 to November 20: 30 days.  
 $90 \div 30 = 3$ ;  $\$1,200 \times 8\% = \$96$ ;  
 $\$96 \div 3 = \$32$ ;  $\$1,200 - \$32 = \$1,168$ .



## Unit 15.

## Section 68.

Part 68c - Porter Assignment 68c.

Exercises 3 (for Part 68c).

and Ex. 1-3 (for Part 68c).

420

Exercise 3  
(continued)

3-3.  $\$3,600 \times 12\% = \$432$

May 1 to May 31: 30 days;

$360 \div 30 = 12; \$432 \div 12 = \$36$

$\$3,600 - \$36 = \$3,564$

3-4. a.  $\$1,800 \times 9\% = \$162$

March 5 to March 25: 20 days;

$60 \div 20 = 3; \$162 \div 3 = \$54.00$

b.  $\$1,800 - \$54 = \$1,746$

3-5.  $\$4,200 - \$225 = \$3,975$

March 2 to April 11: 40 days;

$360 \div 12 = 30; \$3,975 \times 9\% = \$357.75$

$\$357.75 \div 12 = \$29.81; \$3,975 - \$29.81 = \$3,945.19$

Porter Assignment 68c.

1. a.  $180 \div 75.6 = 2.38$

b.  $118\% \text{ of } 96 = 113.28$

c.  $\frac{1}{2} \text{ of } \frac{1}{5} = \frac{1}{10}$

d.  $28 \times 2\frac{2}{7} = \frac{28}{1} \times \frac{16}{7} = 64$

e.  $\frac{1}{2} \times 18 \times 12 = 108$

f.  $\$1,800 \times 8\frac{1}{2}\% (\$153.00) \text{ for } 80 \text{ days}$   
 $= \$34.00$

2. May 18 to June 14: 27 days.

3.  $\$1,800 \times 9\frac{1}{2}\% = \$171$

April 14 to May 14: 30 days;

$360 \div 12 = 30; \$171 \div 12 = \$14.25$

$\$14.25 \times 2 = \$28.50$

$\$1,800.00 - \$28.50 = \$1,771.50$



# Section 68.

Review Assignment 68c - Part 68d.

Exercises 4-7 (for Review Assignment 68c),  
and Exercise 4 (for Part 68d).

Unit 15.

421

$$4. \quad 100\% - 20\% = 80\%;$$

$$80\% - 12\% (15\% \text{ of } 80\%) = 68\%;$$

$$68\% - 3.4\% (5\% \text{ of } 68\%) = 64.6\%.$$

$$5. \quad \$31.00 - \$20.00 = \$11.00;$$

$$\$11.00 \div \$20.00 = 55\%;$$

$$\$25.00 + 55\% (\$13.75) = \$38.75.$$

$$6. \quad 598L - 520L = 78L;$$

$$78L \div 520L = 15\%.$$

$$7. \quad \$237.50 - 5\% (\$11.87) = \$225.63.$$

4-1.	Face	Interest Rate	Date of Note	Time of Note	Discount Date	Discount Rate	Proceeds
a.	\$ 600	9%	May 2	60 days	May 22	9%	\$602.91
b.	1,200	10%	Jan. 20	30 days	Jan. 30	10%	1,203.28
c.	480	8%	July 26	45 days	Aug. 10	8%	481.57
d.	2,000	9%	Oct. 12	3 mos.	Oct. 24	9%	2,005.12
e.	1,500	10%	Mar. 28	2 mos.	Apr. 18	10%	1,508.06
f.	800	8%	May 25	90 days	June 4	9%	799.68
g.	3,000	9%	June 8	60 days	June 28	10%	3,011.17
h.	4,000	9%	July 22	3 mos.	Aug. 23	11%	4,015.02

7-2. June 1 to June 11: 10 days;

$$360 \div 90 = 4; \$1,200.00 \times 9\% (\$108.00) \text{ for 90 days}$$

$$= \$27.00; \$1,200.00 + \$27.00 = \$1,227.00;$$

$$\$1,227.00 \times 9\% (\$110.43) \div 36 = \$3.0675;$$

$$\$3.0675 \times 8 = \$24.54; \$1,227.00 - \$24.54 = \$1,202.46.$$

## Unit 15.

## Section 68.

Part 68d - Review Assignment # 68d.

Exercises 4 (for Part 68d),

and Exercises 1-5 (for Review Assignment 68d).

422

Exercise +  
(continued).

4-3. November 26 to January 27: 60 days;

$$\$2,400 \times 10\% (\$2,400 \div 4 = \$60); \$2,400 + \$60 = \$2,460;$$

$$\$2,460 \times 11\% (\$2,460 \div 4 = \$61.50);$$

$$\$61.50 \times 1.5 = \$92.25; \$2,460 - \$92.25 = \$2,367.75.$$

Review Assignment  
68d.

1. a.  $\frac{1}{3}$  of  $\frac{1}{4} = \frac{1}{12}$ .

b.  $35 \times \frac{22}{7} = \frac{35^5 \times 22}{1} = 110.$

$$2 \times 3.14 \times 1\frac{1}{2} = \frac{2 \times 3.14 \times 3}{2} = \frac{9.42}{1} = 9.42$$

d.  $10.73 + 902.1 + 5.784 + 0.246 = 918.910$

e. \$105 is 110% greater than \$50.

f.  $22\% \text{ of } 164.3 \text{ m}^2 = 36.146.$

2. Jan. 24 to August 2: 53 days.

3. October 15 to November 16: 32 days;

$$\$1,600 \times 8\% = \$128; \$128 \div 12 = \$10.67;$$

$$\$10.67 \times 3 = \$32.00; \$1,600 - \$32 = \$1,568.$$

4. a.  $\$5,000 \times 9\% = \$45;$

$$\$45 \div 4.5 = \$10;$$

$$\text{b. } \$5,000 - \$10 = \$4,990.$$

5. May 24 to June 8: 15 days;

$$\$4,000 \times 9\% (\$360) \text{ for 45 days} = \$45;$$

$$\$45 \div 3 = \$15; \$4,000 + \$15 = \$4,015;$$

$$\$4,000 \times 10\% = \$400.00;$$

$$\$4,000 - \$400 = \$3,600.$$



## Section 68.

Unit 15.

Review Assignment 68d - General Review.  
Exercises 6-7 (for Review Assignment 68d),  
and Exercises 1-5 (for General Review).

423

$$6. \$13.67 \div 5\% = \$273.40.$$

#13

$$7. \$96.00 - 25\% (\$24.00) = \$72.00;$$

$$\$72.00 - 10\% (\$7.20) = \$64.80.$$

$$34\% + 6\% = 40\%;$$

$$\$64.80 + 40\% (\$25.92) = \$90.72.$$

$$\$90.72 \div 12 = \$7.56.$$

$$1. a. 304.7 - 276.28 = 28.42.$$

$$b. 47.1 \times 3.8 = 178.98.$$

$$c. 162.97 \div 37.9 = 4.3.$$

$$d. 15\frac{3}{4} - 6\frac{7}{8} = 15\frac{6}{8} - 6\frac{7}{8} = 8\frac{7}{8}.$$

$$e. 5\frac{4}{9} \times 1\frac{5}{7} = \frac{49}{9} \times \frac{124}{71} = \frac{28}{3} = 9\frac{1}{3}.$$

$$f. 13\frac{3}{4} \div 1\frac{2}{3} = \frac{55}{4} \times \frac{3}{2} = \frac{33}{4} = 8\frac{1}{4}.$$

$$g. 74.08 + 531.7 + 2.008 + 52.76 = 660.548$$

$$h. 6\frac{7}{12} + 7\frac{3}{4} + 2\frac{1}{8} + 11\frac{5}{6} =$$

$$6\frac{14}{24} + 7\frac{18}{24} + 6\frac{3}{24} + 44\frac{20}{24} = 63\frac{55}{24}.$$

$$2. \$21.25 \times 4 = \$85.00;$$

$$\$85.00 \div \$1,000 = 8.5\%.$$

$$3. \$1,000 \times 6\frac{1}{2}\% = \$65.00;$$

$$\$65.00 \div 4 = \$16.25;$$

$$\$16.25 \times 8 = \$130.00.$$

$$4. \$50.00 \times 7\% = \$3.50;$$

$$\$3.50 \div \$50.00 = 7\%.$$

$$5. \$52,000 + \$3,080 = \$55,080;$$

$$\$55,080 \times 10\% = \$5,508;$$

$$\$5,508 \div 12 = \$459.$$



## Unit 15.

Section 68.  
General Problem.  
Exercises 6-12.

424

General Problem  
(continued).

$$6. \$264 \times 22 \times 12 = \$63,360;$$

$$\$63,360 - \$30,000 = \$33,360.$$

$$7. \$6,000 + \$4,300 = \$10,300;$$

$$\$10,300 - \$6,500 = \$4,200;$$

$$\$4,200 \div 4 = \$1,050.$$

$$8. \$103.50 - \$82.80 = \$20.70;$$

$$\$20.70 \div \$82.80 = 25\%.$$

$$9. \text{ Abel Corporation: } \$1,700 - 10\% (\$170) = \$1,530;$$

$$\$1,530 + \$45 = \$1,575.$$

$$\text{Baker Company: } \$1,700 - 15\% (\$255) = \$1,445;$$

$$\$1,445 - \$1,575 = \$130; \text{ Abel Corporation}$$

has the better offer.

$$10. \$1,200 \times 10\% (\$120) \text{ for 40 days} = \$13.33;$$

$$\$36.00 - \$13.33 = \$22.67.$$

$$11. \$14.40 - \$9.00 = \$5.40;$$

$$a. \$5.40 \div \$9.00 = 60\%;$$

$$b. \$5.40 \div \$14.40 = 37\frac{1}{2}\%.$$

$$12. \$900 - 25\% (\$225) = \$675;$$

$$\$675 + \$65 = \$740.$$

$$\$740 + 55\% (\$407) = \$1,147.$$

Section 68.  
General Review.  
Exercises 13-19.

Unit 19

425

13.  $\$27,000 + \$21,000 + \$12,000 = \$60,000$ ;  
 $\$27,000 \div \$60,000 = 45\%$ ;  $45\%$  of  $\$11,600 = \$5,220$ .  
 $\$21,000 \div \$60,000 = 35\%$ ;  $35\%$  of  $\$11,600 = \$4,060$ .  
 $\$12,000 \div \$60,000 = 20\%$ ;  $20\%$  of  $\$11,600 = \$2,320$ .

Rome Company:  $\$5,220$ .

Indiana Company:  $\$4,060$ .

Cranston Company:  $\$2,320$ .

14.  $27.6 \div 0.6 = 46$ .

15.  $\$330.00 \div 6\% = \$5,500$ .

16. In Account with Laurie Skelton

Date	Withdrawal	Deposit	Interest	Balance
<sup>1981</sup> Jan. 2		$\$900.00$		$\$900.00$
Apr. 1		$750.00$	$\$20.63$	$1,670.63$
July 1			$20.88$	$1,691.51$
Oct. 1			$21.14$	$1,712.65$

5% interest a year

17.  $\$3,000 \div 6\% = \$50,000$ .

18.  $\$5.95 + 30\% = \$7.74$ .

19.  $\$45,000 \times 80\% = \$36,000$ ;  
 $\$30,000 \div \$36,000 = 83\frac{1}{3}\%$ ;  
 $83\frac{1}{3}\% \times \$8,400 = \$7,000$ .

Unit 15.

Section 69.  
Exercise 1.

26

Section 69.

1-1.	Total Creditor's Claims	Cash Available for Creditors	Percent of Creditor's Claims Paid
a.	\$21,600	\$ 8,208	38%
b.	12,175	4,870	40%
c.	23,400	15,210	65%
d.	137,400	41,220	30%

1-2.	Total Creditor's Claims	Cash Available for Creditors	Percent of Creditor's Claims Paid
a.	\$25,800	\$ 16,254	63¢
b.	18,200	4,368	24¢
c.	42,500	17,000	40¢
d.	22,750	5,915	26¢

1-3.  $\$18,000 \div \$60,000 = 30\%$ .

1-4.  $\$3,680.60 \div \$8,365.00 = 44\%$ .

1-5.  $\$4,206.00 \times \$.56 = \$2,355.36$ .

1-6.  $\$927.50 \times \$.352 = \$326.48$ .

1-7.  $\$2,645.00 \times \$.564 = \$1,491.78$ .

1-8. a.  $\$50,000 - \$8,000 = \$42,000$ .

b.  $\$42,000 \div \$120,000 = 35\%$ .

c.  $\$8,400 \times \$.35 = \$2,940$ .



Section 69 - Review Assignment 69.  
Exercise 2 (for Section 69),  
and Exercises 1-4 (for Review Assignment 69).

Unit 1

42

2-1.  $\$17,190 \div \$28,650 = 60\%$ ;  
 $\$1,250 \times \$ .60 = \$750.$

2-2.  $\$22,427 \div \$54,700 = 41\%$ ;  
 $\$4,600 \times \$ .41 = \$1,886.$

2-3.  $\$5,420 + \$724 + \$12,854 + \$5,682 = \$24,680$ ;  
 $\$5,429.60 \div \$24,680 = 22\%$ ;  
 $\$724 \times \$ .22 = \$159.28.$

2-4.  $\$7,732 + \$16,597 + \$2,850 + \$5,271 = \$32,450$ ;  
 $\$8,761.50 \div \$32,450 = 27\%$ ;  
 $\$2,850 \times \$ .27 = \$769.50.$

1. a.  $\frac{22}{7} \times 42 = \frac{22}{1} \times \frac{42}{7} = 132.$

b.  $\frac{3}{4} \div \frac{1}{2} = \frac{3}{4} \times 2 = \frac{6}{4} = 1\frac{1}{2}.$

c.  $2 \times 3.14 \times 2\frac{1}{2} = 2 \times 3.14 \times 2.5 = 15.7.$

d.  $\$300 \times 12\% (\$36)$  for 100 days  
 $= \$10.00.$

2.  $\$8,052 \div \$26,840 = 30\%$ .

3.  $\$10,575 \div \$23,500 = 45\%$ ;  
 $\$1,080 \times \$ .45 = \$486.$

4.  $\$17.50 + 52\% (\$9.10) = \$26.60.$

nit 15.

Sections 69-70.

Review Assignment 69 - Part 70a.

Exercises 5-7 (for Review Assignment 69),  
and Exercise 1 (for Part 70a).

28

Review Assignment  
7 (continued).

5.  $\$12.00 - \$7.50 = \$4.50$ ;  
 $\$4.50 - \$7.50 = 60\%$ .  
 $\$8.75 + 60\% (\$5.25) = \$14.00$ .

6. August 29 to October 20: 52 days;  
 $\$1,600 \times 9\% = \$144$ ;  $\$144 \div 4 = \$36$ .  
 $\$1,600 - \$36 = \$1,564$ .  
 $\$1,564 \times 10\% (\$156.40)$  for 52 days -  
 $= \$90.40$ ;  $\$1,564.00 - \$90.40 = \$1,473.60$ .

7.  $100\% - 38\% = 62\%$ ;  
 $38\% \div 62\% = 61.3\%$ .

Section 70.

Part 70a.

	Charge #	Commission		Other Charges	Total Charges	Net Proceeds
		Rate	Amount			
1-1	\$742.00	8%	\$59.36	\$36.74	\$96.15	\$646.45
1-2	234.80	10%	65.43	18.23	83.66	570.64
1-3	1,456.20	9%	131.06	58.25	189.31	1,266.89

1-4.  $100 \times \$8.75 = \$875.00$   
 $200 \times 7.25 = 1,450.00$   
 $55 \times 8.00 = 440.00$   
 $\$2,765.00$

$8\%$  of  $\$2,765.00 = \$221.20$ ;  
 $\$221.20 + \$75.00 = \$296.20$ ;  
 $\$2,765.00 - \$296.20 = \$2,468.80$ .



429

1-5.  $1,850 \times 55\text{¢} = \$1,017.50;$   
 $10\% \text{ of } \$1,017.50 = \$101.75;$   
 $\$101.75 + \$18.72 = \$120.47;$   
 $\$1,017.50 - \$120.47 = \$897.03.$

6.  $3 \times 1,400 = 4,200;$   
 $4,200 \times \$6.75 = \$28,350.00;$   
 $8\% \text{ of } \$28,350 = \$2,268;$   
 $4,200 \times \$1.40 = \$1,680;$   
 $\$2,268 + \$1,680 + \$565 = \$4,513;$   
 $\$28,350 - \$4,513 = \$23,837.$

7.  $12 \times 30 = 360;$   $360 \times \$0.70 = \$252.00;$   
 $10\% \text{ of } \$252.00 = \$25.20;$   
 $\$25.20 + \$15.65 + \$3.75 = \$44.60;$   
 $\$252.00 - \$44.60 = \$207.40.$

8.  $850 \times \$5.10 = \$4,335;$   
 $\$4,335 + \$382.65 = \$4,717.65.$   
 $\$5,525 \times 9\% = \$497.25;$   
 $\$497.25 + \$382.65 = \$879.90;$   
 $\$5,525 - \$879.90 = \$4,645.10;$   
 $\$4,717.65 - \$4,645.10 = \$72.55.$

9.  $140 \times \$4.75 = \$665.00$   
 $150 \times 8.10 = 1,215.00$   
 $\$1,880.00$   
 $\$1,880 \times 10\% = \$188.00;$   
 $\$188.00 + \$75.80 = \$263.80;$   
 $\$1,880.00 - \$263.80 = \$1,616.20.$



## Unit 15.

## Section 70.

## Review Assignment 70a.

## Exercises 1-6.

430

Review Assignment  
70a.

1. account sales: (c) A commission merchant's report

bankrupt: (a) Legally insolvent and unable to pay debts.

commission merchant: (d) An agent who buys and sells farm or other products on commission.

gross proceeds: (b) The amount taken in by a commission merchant for goods sold.

$$\begin{aligned}
 2. \quad 350 \times \$5.40 &= \$1,890.00; \\
 \$1,890.00 \times 8\% &= \$151.20; \\
 \$151.20 + \$56.85 &= \$208.05; \\
 \$1,890.00 - \$208.05 &= \$1,681.95.
 \end{aligned}$$

$$\begin{aligned}
 3. \quad 10 \times 36 &= 360; \quad 360 \times \$15.30 = \$5,508; \\
 \$5,508 + \$22.50 &= \$5,530.50; \\
 \$5,530.50 + 33\frac{1}{3}\% (\$1,843.50) &= \$7,374.00; \\
 \$7,374.00 \div 360 &= \$20.48.
 \end{aligned}$$

$$\begin{aligned}
 4. \quad \$2,800 \times 10\% &= \$280; \quad \$280 \div 4 = \$70; \\
 \$70 \div 12 &= \$5.83; \quad \$2,800 - \$5.83 = \$2,794.17
 \end{aligned}$$

$$\begin{aligned}
 5. \quad \$14,498 \div \$32,950 &= 44\%; \\
 \$3,275 \times 44\% &= \$1,441.
 \end{aligned}$$

$$\begin{aligned}
 6. \quad \$1,200.00 \times 8\% (\$96.00) \text{ for } 90 \text{ days} &= \$24.00; \\
 \$1,200.00 + \$24.00 &= \$1,224.00; \\
 \$1,224.00 - \$85.73 &= \$1,138.27; \\
 \text{September 15 to October 16: } 30 \text{ days;} \\
 \$1,138.27 \times 8\% &= \$91.06; \quad \$91.06 \div 12 = \$7.59; \\
 \$7.59 \times 2 &= \$15.18; \quad \$1,138.27 - \$15.18 = \$1,123.09.
 \end{aligned}$$

# Section 70.

## Part 70b - Review Assignment 70b.

Unit 15

### Exercise 2 (for Part 70b),

and Exercises 1-2 (for Review Assignment 70b).

431

	Prime Cost	Commission		Other Charges	Total Charges	Gross Cost
		Rate	Amount			
2-1.	\$1,845.00	8%	\$147.60	\$52.34	\$199.94	\$2,044.94
2-2.	850.00	10%	85.00	29.35	114.35	964.35
2-3.	1,354.75	7%	94.83	84.20	179.03	1,533.78

$$\begin{aligned}
 2-4. \quad & 3,000 \times \$3 = \$9,000; \\
 & \$9,000 \times 7\% = \$630; \\
 & \$9,000 + \$630 = \$9,630; \\
 & \$9,630.00 + \$423.50 = \$10,053.50.
 \end{aligned}$$

$$\begin{aligned}
 2-5. \quad & 3,500 \times \$ .60 = \$2,100; \\
 & \$2,100 \times 8\% = \$168; \\
 & \$168.00 + \$2,100.00 = \$2,268.00; \\
 & \$2,268.00 + \$59.50 = \$2,327.50.
 \end{aligned}$$

$$\begin{aligned}
 2-6. \quad & 370 \times \$6.80 = \$2,516.00; \\
 & \$2,516.00 \times 10\% = \$251.60; \\
 & \$2,516.00 + \$251.60 = \$2,767.60; \\
 & \$2,767.60 + \$79.60 = \$2,847.20.
 \end{aligned}$$

account purchase: (c) A commission merchant's report of goods bought.

gross cost: (b) Prime cost plus commission and expenses.

prime cost: (a) The amount a commission merchant pays for goods.

$$a. \quad \frac{3}{4} \times \frac{7}{8} = \frac{21}{32}$$

$$b. \quad \frac{5}{6} \div \frac{1}{2} = \frac{5}{6} \times \frac{2}{1} = \frac{10}{6} = 1\frac{4}{6} = 1\frac{2}{3}$$

$$c. \quad 8 \div \frac{2}{3} = 8 \times \frac{3}{2} = \frac{24}{2} = 12$$

$$d. \quad 4\frac{1}{2} \times 2\frac{1}{2} = \frac{9}{2} \times \frac{5}{2} = \frac{45}{4} = 11\frac{1}{4}$$

Unit 15.

Section 70.

Review Assignment 70(a) - General Review,  
Exercises 2-6 (for Review Assignment 70.b)  
and Exercise 1 (for General Review).

732

Assignment  
Exercise 2  
(continued)

$$c. \$5,000 \times 12\% (\$600) \div 180 \text{ days} = \$300$$

$$3. \quad 200 \times \$6.50 = \$1,300.00$$

$$240 \times 5.75 = 1,380.00$$

$$300 \times 6.25 = 1,875.00$$

$$\underline{\$4,555.00}$$

$$\$4,555.00 \times 8\% = \$364.00$$

$$\$364.00 + \$87.65 = \$451.65$$

$$\$4,555.00 - \$451.65 = \$4,098.35$$

$$4. \quad 650 - 300 = 350 \quad 350 \times \$6.50 = \$2,275.00$$

$$300 \times \$6.50 = \$1,950.00$$

$$\$1,950.00 + \$2,275.00 = \$4,225.00$$

$$1\% \text{ of } \$4,225.00 = \$42.25$$

$$\$4,225.00 - \$42.25 = \$4,182.75$$

$$\$4,182.75 - \$418.28 = \$3,764.47$$

$$5. \quad 20 \times 16 = 320; \quad 320 - 10 = 310$$

$$\$11.16 \div 310 = \$0.036$$

$$\$0.036 \times 310 = \$11.16$$

$$\$0.048 \times 310 = \$14.88$$

$$6. \quad \$6,000 \times 10\% = \$600; \quad \$600 \div 4 = \$150$$

$$\$6,000 + \$150 = \$6,150$$

$$\$6,150 \div 10 = \$615; \quad \$615 \div 2 = \$307.50$$

$$\$307.50 \times 2 = \$615.00; \quad \$6,150.00 - \$615.00 = \$5,535.00$$

General  
Review

$$1. \quad a. \quad 4\frac{1}{4} + 2\frac{1}{2} + 10\frac{1}{2} + 8\frac{1}{2}$$

$$= 4\frac{2}{4} + 2\frac{2}{4} + 19\frac{2}{4} + 8\frac{2}{4} = 33\frac{2}{4} = 34\frac{1}{2}$$

$$b. \quad 113\frac{1}{6} - 16\frac{1}{3} = 113\frac{1}{6} - 16\frac{2}{6} = 96\frac{5}{6}$$

$$c. \quad 56\frac{1}{3} \times 9\frac{1}{4} = \frac{169}{3} \times \frac{37}{4} = \frac{6,253}{12} = 521\frac{1}{12}$$

$$d. \quad 12\frac{1}{4} \div 5\frac{3}{5} = \frac{49}{4} \times \frac{5}{28} = \frac{35}{16} = 2\frac{3}{16}$$



Section 70,  
General Review,  
Exercises 1-7.

Unit 15.

433

e.  $115.72 \times 3.9 = 451.308$ .

f.  $1,530.08 \div 7.3 = 209.6$ .

g.  $\frac{2}{7} = .29$ .

2.  $\$10.00 \times 12 = \$120.00$ ;  
 $\$120.00 + \$35.00 = \$155.00$ ;  
 $\$155.00 - \$139.95 = \$15.05$ .

3.  $\$37.50 - \$30.00 = \$7.50$ ;  
 $\$7.50 \div \$30.00 = 25\%$ .

4.  $60 \times \$28.125 = \$1,687.50$ ;  
 $\$1,687.50 + \$38.31 = \$1,725.81$ ;  
 $60 \times \$26.75 = \$1,605.00$ ;  
 $\$1,605.00 + \$40.18 = \$1,645.18$ ;  
 $\$1,725.81 - \$1,645.18 = \$80.63$ .

5.  $\$84,250 + \$26,960 = \$111,210$ ;  
 $\$111,210 - \$52,235 = \$58,975$ ;  
 $\$58,975 \div \$84,250 = 70\%$ .

6.  $\$20.00 - \$12.50 = \$7.50$ ;  
 $\$7.50 \div \$12.50 = 60\%$ ;  
 $\$13.75 + 60\% (\$8.25) = \$22.00$ .

7.  $\$2,000 - 2\% (\$40) = \$1,960$ ;  
 $\$2,000 \times 9\% (\$180) \text{ for 20 days} = \$10.00$ ;  
 $\$40.00 - \$10.00 = \$30.00$ .

Unit 15. Section 70.  
General Review.  
Exercises 8-14.

434

General Review  
(Continued)

8. Brute:  $\$1,260 - 15\% (\$189) = \$1,071$ ;  
 $\$1,071 - 10\% (\$107.10) = \$963.90$ ;  
 Wells:  $\$965 - 2\% (\$19.30) = \$945.70$ ;  
 $\$963.90 - \$945.70 = \$18.20$ ; Wells has  
 the better offer.

9. April 9 to May 15: 36 days.

10.  $\$6,000 \times 12\% (\$720)$  for 4 $\frac{1}{2}$  mths =  $\$80$ .

11.  $\$632.00 \times \$423 = \$266.49$ .

12.  $100\% - 20\% = 80\%$ ;  
 $60.71 \div 80\% = \$75.00$ .

13.  $\$20.00 + 36\% (\$7.20) = \$27.20$ .

Karen Nelson Reconciliation Statement May 1, 1981			
Checkbook balance: $\$267.08$		Bank statement balance: $\$342.17$	
Less:		Less outstanding checks:	
Service charge $\$2.15$		#612	$\$8.08$
Overdraft $15.00$	$17.15$	#613	$36.22$
Sub-total:	$249.93$	#614	$22.44$
Adj: Deposit not recorded	$25.50$		$66.74$
Correct checkbook balance	$\$275.43$	Adjusted bank balance: $\$275.43$	



Section 71.

Part 71a.

Exercises 1.

Unit 16.

## Unit 16, Section 71.

435

1-1. Raw materials \$ 137,544  
Direct labor 180,182  
Factory expense + 81,642  
Total factory cost \$ 399,368

1-2. Raw materials \$ 44,742  
Direct labor 63,286  
Factory expense + 12,714  
Total factory cost \$ 120,742

1-3. Supervisors' wages \$ 150,482.00  
Building rent 3,570.00  
Depreciation 11,560.00  
Light, heat, and power 3,895.40  
Cleaning and repairs 8,365.20  
Other expenses + 1,964.72  
Total factory overhead \$ 179,837.32

1-4. a. Salaries and wages \$ 18,000.00  
Rent 8,250.00  
Depreciation and repairs 10,376.00  
Power, heat and light 4,281.30  
Factory supplies 6,590.70  
Other factory expense + 2,046.90  
Total factory overhead \$ 49,544.90

b. Raw materials cost \$ 139,682.40  
Direct labor totaled 183,272.00  
Factory expenses + 49,544.90  
Total factory cost \$ 372,499.30



Unit 16.

Section 71.

Part 71a.

Exercises 1-2.

436

Exercise 1

1-5. Materials \$2,061.68

Labor 2,635.28

Expense + 1,483.13

Total = \$6,180.69

 $75 \times 12 \div 900, \$6,180.69 \div 900 = \$6.87$ 2-1.  $2,000 + 1,800 + 5,200 + 1,500 = 10,500$  or 10.5Wood:  $\frac{1}{4}$  of \$24,000 = \$6,000Metal:  $\frac{3}{8}$  of 24,000 = 9,000Glass:  $\frac{1}{2}$  of 24,000 = 12,000Plastic:  $\frac{1}{4}$  of 24,000 = 6,000

Total: \$33,000

2-2.  $72 + 24 + 3 + 51 = 150$  unitsDepartment W:  $\frac{20}{150}$  of \$33,000 = \$4,400Department X:  $\frac{3}{150}$  of 33,000 = 6,600Department Y:  $\frac{1}{150}$  of 33,000 = 2,200Department Z:  $\frac{2}{150}$  of 33,000 = 4,400

Total: \$17,600

2-3.  $2,800 + 4,200 + 7,000 = 14,000$  unitsDepartment A:  $\frac{1}{3}$  of \$3,600 = \$1,200Department B:  $\frac{2}{3}$  of 3,600 = 2,400Department C:  $\frac{1}{3}$  of 3,600 = 1,200

Total: \$3,600

2-4.  $\$33,000 + \$3,200 + \$1,400 = \$37,600$ Department K:  $\frac{5}{11}$  of \$37,600 = \$17,090.91Department L:  $\frac{3}{11}$  of 37,600 = \$10,254.55Department M:  $\frac{3}{11}$  of 37,600 = \$10,254.55

Total: \$37,600

# Section 71.

Review Assignment 71a.

Exercises 1-4.

Unit 16

437

1. a. direct labor; (b) Wages of production workers.  
factory expense; (c) Rent, depreciation, heat,  
light, power.  
raw materials: (a) Cost of materials that  
are in the finished product.  
total factory cost: (d) The sum of labor, materials,  
and expenses.

2. a.  $\frac{2}{3} \times \frac{4}{5} = \frac{8}{15} = \frac{2}{3}$ .  
b.  $6 \div \frac{2}{3} = 6 \times \frac{3}{2} = \frac{18}{2} = 9$ .  
c.  $4\frac{1}{2} \times 3\frac{1}{2} = \frac{9}{2} \times \frac{7}{2} = \frac{63}{4} = 15\frac{3}{4}$ .  
d.  $\frac{3}{5} \div 4 = \frac{3}{5} \times \frac{1}{4} = \frac{3}{20}$ .  
e.  $\frac{5}{8} = 62.5\%$ .  
f.  $60\% = \frac{60}{100} = \frac{3}{5}$ .  
g.  $\$585 \times 6\% (\$35.10)$  for 140 days  
=  $\$13.65$ .

3. Materials: \$ 551.35  
Labor: 1,011.40  
Factory overhead: + 112.25  
Total factory cost: \$1,675.00  
 $\$1,675.00 \div 500 = \$3.35$ .

4.  $550 \times \$4.45 = \$2,447.50$ ;  
 $\$2,447.50 \times 8\% (\$195.80) = \$2,643.30$ ;  
 $\$2,643.30 + \$85.36 = \$2,728.66$ ;  
 $\$2,728.66 \div 550 = \$4.96$ .

Unit 16. Section 71.  
 Review Assignment 71a-Part 71b.  
 Exercises 5-7 (for Review Assignment 71a),  
 and Exercise 3 (for Part 71b).

438.

Unit 16  
 71a (continued)

5.  $\$1,370 \times 12\% = \$164.40$   
 $\$164.40 \div 3 = \$54.80$   
 $\$54.80 \div 12 = \$4.57$   
 $\$4.57 \times 3 = \$13.70$   
 $\$1,370.00 - \$13.70 = \$1,356.30$

6.  $600\text{m}^2 + 680\text{m}^2 + 320\text{m}^2 + 400\text{m}^2 = 2,000\text{m}^2$

Department A:  $\frac{4}{10}$  of  $\$40,000 = \$16,000$   
 Department B:  $\frac{17}{50}$  of  $\$40,000 = 13,600$   
 Department C:  $\frac{1}{5}$  of  $\$40,000 = 8,000$   
 Department D:  $\frac{1}{5}$  of  $\$40,000 = 8,000$   
 $\$40,000$

7.  $\$220.00 \div 56\% = \$392.86$

Part 71b

3. Item	Original Cost	Rate of Depreciation	Book Value at End of First Year	Book Value at End of Third Year
a. Sewing Machine	\$1,800	8%	\$1,656.00	\$1,401.64
b. Motor	500	9%	455.00	376.79
c. Lathe	3,000	7%	2,790.00	2,413.07
d. Tools	1,200	12%	1,056.00	817.77
e. Conveyor	5,000	11%	4,450.00	3,524.85
f. Planer	7,000	15%	5,950.00	4,298.88

3-2.  $\$2,000.00 - 8\% (\$160.00) = \$1,840.00$   
 $\$1,840.00 - 8\% (\$147.20) = \$1,692.80$   
 $\$1,692.80 - 8\% (\$135.42) = \$1,557.38$   
 $\$1,557.38 - 8\% (\$124.59) = \$1,432.79$



Section 71.

Unit 16.

Part 71.b. - Project Assignment 71.b.

Exercises 3-4. (for Unit 7)

439

3-3.  $\$15,000.00 - 8\% (\$1,200.00) = \$13,800.00$   
 $\$13,800.00 - 8\% (\$1,104.00) = \$12,696.00$   
 $\$12,696.00 - 8\% (\$1,015.68) = \$11,680.32$   
 $\$11,680.32 - 8\% (\$934.43) = \$10,745.90$   
 $\$10,745.90 - 8\% (\$859.67) = \$9,886.22$   
 $\$9,886.22 - 8\% (\$790.80) = \$9,095.33$

3-4.  $\$3,500.00 - 22\% (\$ 770.00) = \$2,730.00$   
 $\$2,730.00 - 22\% (\$ 600.60) = \$2,129.40$   
 $\$2,129.40 - 22\% (\$ 468.47) = \$1,660.93$   
 $\$1,660.93 - 22\% (\$ 365.41) = \$1,295.53$

4-1.  $\$13,500 - \$1,800 = \$11,700$ ;  $1+2+3+4=10$ ;  
 $\frac{4}{10} \times \$11,700 = \$4,680$ ;  
 $\$13,500 - \$4,680 = \$8,820$ ;  
 $\frac{3}{10} \times \$11,700 = \$3,510$ ;  
 $\$8,820 - \$3,510 = \$5,310$ .

4-2.  $\$50,000 - \$5,000 = \$45,000$ ;  $1+2+3+4$   
 $+5+6+7+8+9 = 45$ ;  
 $\frac{9}{45} \times \$45,000 = \$9,000$ ;  
 $\$50,000 - \$9,000 = \$41,000$ ; (first year)  
 $\frac{8}{45} \times \$45,000 = \$8,000$ ;  
 $\$41,000 - \$8,000 = \$33,000$ ; (second year)  
 $\frac{7}{45} \times \$45,000 = \$7,000$ ;  
 $\$33,000 - \$7,000 = \$26,000$ . (third year)

## Unit 16.

## Section 71.

Part 71b - Review Assignment 71b.

Exercise 4 (for Part 71b),

and Exercises 1-2 (for Review Assignment 71b).

440

Exercise 4  
(continued).

$$4-3. \$8,680 - \$1,680 = \$7,000; 1+2+3+4=10;$$

$$\frac{4}{10} \times \$7,000 = \$2,800;$$

$$\$8,680 - \$2,800 = \$5,880; \text{ (first year)}$$

$$\frac{3}{10} \times \$7,000 = \$2,100;$$

$$\$5,880 - \$2,100 = \$3,780; \text{ (second year)}$$

$$\frac{2}{10} \times \$7,000 = \$1,400;$$

$$\$3,780 - \$1,400 = \$2,380; \text{ (third year)}$$

$$\frac{1}{10} \times \$7,000 = \$700;$$

$$\$2,380 - \$700 = \$1,680. \text{ (fourth year)}$$

$$4-4. \$58,400 - \$4,000 = \$54,400; 1+2+3+4+5+6+7+8=36.$$

$$\frac{8}{36} \times \$54,400 = \$12,088.89;$$

$$\$58,400.00 - \$12,088.89 = \$46,311.01;$$

$$\frac{7}{36} \times \$54,400 = \$10,577.78;$$

$$\$46,311.01 - \$10,577.78 = \$35,733.23;$$

$$\frac{6}{36} \times \$54,400 = \$9,066.63;$$

$$\$35,733.23 - \$9,066.63 = \$26,666.60.$$

Review Assignment 71b.

1. book value: (c) Original cost less total depreciation to date.

declining-balance method: (a) Depreciation at a fixed rate on a decreasing balance.

sum-of-the-years-digits method: (b) Depreciation at a variable rate.

2. Materials: \$ 795.40

Labor: 1,120.35

Overhead: + 202.75

Total factory cost: \$2,118.50

$$\$2,118.50 \div 1000 = \$2.12.$$



# Sections 71-72.

Review Assignment 71b - Part 72a.

Exercises 3-7 (for Review Assignment 71b),  
and Exercise 1 (for Part 72a).

Unit 16.

441

3.  $\$4,250 - \$300 = \$3,950;$   
 $\$3,950 \div 10 = \$395;$   
 $\$395 \times 7 = \$2,765;$   
 $\$4,250 - \$2,765 = \$1,485.$
4.  $\$973.00 + 8\% (\$77.84) = \$1,050.84;$   
 $\$1,050.84 + \$31.65 = \$1,082.49.$
5.  $\$1,920 \times 10\% (\$192.00) \text{ for } 90 \text{ days} = \$48.00;$   
 $\$48.00 \div 3 = \$16.00; \$16.00 \times 2 = \$32.00;$   
 $\$1,920.00 - \$32.00 = \$1,888.00.$
6.  $\$9,600 - 12\frac{1}{2}\% (\$1,200) = \$8,400;$   
 $\$8,400 - 12\frac{1}{2}\% (\$1,050) = \$7,350;$   
 $\$7,350 - 12\frac{1}{2}\% (\$918.75) = \$6,431.25,$
7.  $\$8,000 - \$800 = \$7,200; 1 + 2 + 3$   
 $+ 4 + 5 + 6 + 7 + 8 + 9;$   
 $\frac{9}{45} \times \$7,200 = \$1,440;$   
 $\$8,000 - \$1,440 = \$6,560; (\text{first year})$   
 $\frac{8}{45} \times \$7,200 = \$1,280;$   
 $\$6,560 - \$1,280 = \$5,280. (\text{second year})$

## Section 72.

- 1-1. Material:  $\$2.08$   
Labor:  $2.58$   
Factory overhead:  $+ .82$   
Total cost:  $\$5.48$   
 $\$7.60 - \$5.48 = \$2.12.$



Unit 16.

Section 72.

Part 72a.

Exercise 18

142

Exercise 18  
continued.

1-2. Material: \$ 22.31

Labor: 31.85

Overhead: + 8.16

Total cost: \$ 62.32

\$ 85.78 - 18% (\$ 15.44) = \$ 70.34

\$ 70.34 - \$ 62.32 = \$ 8.02.

1-3. Material: \$ 9.97

Labor: 13.75

Factory overhead: + 7.08

Total cost: \$ 30.80

\$ 44.00 - 20% (\$ 8.80) = \$ 35.20

\$ 35.20 - \$ 30.80 = \$ 4.40

\$ 4.40 ÷ \$ 30.80 = 14.3%

1-4. Material: \$ 22,375

Labor: 30,015

Factory overhead: + 7,700

Total cost: \$ 60,090

4000 × \$ 20.00 = \$ 80,000

\$ 80,000 - 17% (\$ 13,600) = \$ 66,400

\$ 66,400 - \$ 60,090 = \$ 6,310.

1-5. Materials: \$ 748.80

Labor: 919.20

Overhead:

(20% of \$ 1,668.00): + 333.60

Total cost: \$ 2,001.60

300 × \$ 9.00 = \$ 2,700.00

\$ 2,700.00 - 16% (\$ 432.00) = \$ 2,268.00

\$ 2,700.00 - \$ 2,001.60 = \$ 698.40

## Section 72.

Unit 16.

Review Assignment 72a.

Exercises 1-4.

443

1. a.  $82 \times 21\frac{1}{2} = 1,763$ ,  
 b.  $81\frac{1}{4} \times 20\frac{1}{2} = 1,665\frac{5}{8}$ ,  
 c.  $\frac{5}{8} \div 4 = \frac{5}{8} \times \frac{1}{4} = \frac{5}{32}$ ,  
 d.  $2\frac{3}{4} \div 3\frac{1}{7} = \frac{11}{4} \times \frac{7}{22} = \frac{7}{8}$ ,  
 e.  $40\% = \frac{40}{100} = \frac{2}{5}$ ,  
 f.  $\frac{9}{20} = \frac{45}{100} = 45\%$ ,  
 g. Due date of 80-day note dated July 3:  
 September 21.

2. Material: \$3,985  
 Labor: 4,280  
 Factory expense: + 1,455  
 Total cost: \$9,720  
 $\$90.00 - 25\% (\$22.50) = \$67.50$ ;  
 $\$67.50 - 10\% (\$6.75) = \$60.75$ .  
 $200 \times \$60.75 = \$12,150.00$ .  
 $\$12,150.00 - 13\% (\$1,579.50) = \$10,570.50$ ;  
 $\$10,570.50 - \$9,720.00 = \$850.50$ ;  
 $\$850.50 \div \$9,720.00 = 8.75\%$ .

3.  $5,200 + 6,500 + 2,600 + 1,300 = 15,600$  sq. ft.;  
 Department A:  $\frac{1}{3}$  of \$3,900 = \$1,300  
 Department B:  $\frac{5}{12}$  of 3,900 = 1,625  
 Department C:  $\frac{1}{6}$  of 3,900 = 650  
 Department D:  $\frac{1}{12}$  of 3,900 = + 325  
 Total = \$3,900

4. \$1,332.11       $\$2,323.70 \div \$6,115.00 = 38\%$ ;  
 1,052.74      38% of \$1,052.74 = \$400.04.  
 2,140.25  
 + 1,589.90  
 \$6,115.00



## Unit 16.

## Section 72.

Review Assignment 72a - Part 72b.

Exercises 5-6 (for Review Assignment 72a),  
and Exercise 2 (for Part 72b).

444

Review Assignment  
72a.

$$\begin{array}{rcl}
 5. \quad 250m^2 & = & 50\% \text{ of } \$2,500 = \$1,250 \\
 150m^2 & = & 30\% \text{ of } 2,500 = 750 \\
 100m^2 & = & 20\% \text{ of } 2,500 = + 500 \\
 & & \text{Total} = \underline{\$2,500}
 \end{array}$$

$$\begin{array}{rcl}
 6. \quad \$12,500.00 - 20\% (\$2,500) & = & \$10,000.00; \\
 \$10,000.00 - 20\% (\$2,000) & = & \$8,000.00; \\
 \$8,000.00 - 20\% (\$1,600) & = & \$6,400.00; \\
 \$6,400.00 - 20\% (\$1,280) & = & \$5,120.00; \\
 \$5,120.00 - 20\% (\$1,024) & = & \$4,096.00.
 \end{array}$$

Part 72b.

$$\begin{array}{rcl}
 2-1. \quad 21\% + 14\% & = & 35\%; \\
 100\% - 35\% & = & 65\%; \\
 \$113.75 \div 65\% & = & \$175.00.
 \end{array}$$

$$\begin{array}{rcl}
 2-2. \quad \text{Material:} & \$ & 11.70 \\
 \text{Labor:} & & 15.60 \\
 \text{Factory expense:} & + & 3.90 \\
 \text{Total cost:} & \underline{\$} & 31.20 \\
 25\% + 8\frac{1}{3}\% & = & 33\frac{1}{3}\%; \\
 100\% - 33\frac{1}{3}\% & = & 66\frac{2}{3}\%; \\
 \$31.20 \div 66\frac{2}{3}\% & = & \$46.80.
 \end{array}$$

$$\begin{array}{rcl}
 2-3. \quad \text{Material:} & \$ & 3.58 \\
 \text{Labor:} & & 4.94 \\
 \text{Factory overhead:} & + & 2.04 \\
 \text{Total cost:} & \underline{\$} & 10.56 \\
 22\% + 14\% & = & 36\%; \\
 100\% - 36\% & = & 64\%; \\
 \$10.56 \div 64\% & = & \$16.50.
 \end{array}$$



# Section 72.

Unit 16.

Part 72b - Review Assignment 72b.

Exercises 2-3 (for Part 72b),

and Exercise 1 (for Review Assignment 72b).

445

2-4. Material: \$ 7.06

Labor: 15.76

Factory expense: 5.48

Selling and general  
administrative expense: 10.40

Total cost: \$38.70

$100\% - 10\% = 90\%$ ;

$\$38.70 \div 90\% = \$43.00$ .

2-5.  $100\% - 16\% = 84\%$ ;

$\$35.70 \div 84\% = \$42.50$ .

3-1.  $100\% - 40\% = 60\%$ ;

$\$6.90 \div 60\% = \$11.50$ .

3-2.  $100\% - 20\% = 80\%$ ;

$100\% - 5\% = 95\%$ ;

$\$4.75 \div 80\% = \$5.94$ ;

$\$5.94 \div 95\% = \$6.25$ .

3-3.	Item	Invoice Price	Trade Discount	List Price
a.	Hair dryer	\$16.25	35%	\$25.00
b.	Can opener	10.50	30%	15.00
c.	Power mower	98.10	40%	163.50
d.	Table saw	168.00	25% and 20%	280.00
e.	Carving knife	14.40	20% and 10%	20.00
f.	Hand mixer	11.90	20% and 15%	17.50

1. a.  $495 \times \frac{2}{3} = 330$ .

b. \$24.42 is 165% of \$14.80.

c. \$25.00 decreased by 15% of itself gives \$21.25.

Unit 16.

Section 72.

Review Assignment 72b - Part 72c.

Exercises 2-5 (for Review Assignment 72b),  
and Exercise 4 (for Part 72c).

446

Review Assignment  
72b (continued).

$$2. \quad 100\% - 18\% = 82\%;$$

$$\$26.65 \div 82\% = \$32.50.$$

$$3. \quad 100\% - 35\% = 65\%;$$

$$\$22.75 \div 65\% = \$35.00.$$

$$4. \quad 100\% - 25\% = 75\%;$$

$$100\% - 20\% = 80\%;$$

$$\$11.25 \div 75\% = \$15.00;$$

$$\$15.00 \div 80\% = \$18.75.$$

$$5. \quad \$292.64 \times 31\% = \$90.72.$$

4-1.	List Price	Present Discounts	New Selling Price	New Selling Price	Additional Discount		New Selling Price
					Amount	Rate	
a.	\$30	40%	\$18	\$15.00	\$3.00	16 $\frac{2}{3}$ %	40%, 16 $\frac{2}{3}$ %
b.	45	33 $\frac{1}{3}$ %	30	24.00	6.00	20%	33 $\frac{1}{3}$ %, 20%
c.	60	30%	42	31.50	10.50	25%	30%, 25%
d.	50	25%, 20%	30	27.00	3.00	10%	25%, 20%, 10%
e.	90	20%, 12 $\frac{1}{2}$ %	63	59.85	3.15	5%	20%, 12 $\frac{1}{2}$ %, 5%

$$4.2. \quad \$12.80 - 25\% (\$3.20) = \$9.60;$$

$$\$9.60 - \$8.40 = \$1.20;$$

$$\$1.20 \div \$9.60 = 12\frac{1}{2}\%.$$

$$4.3. \quad \$540.00 - 33\frac{1}{3}\% (\$180.00) = \$360.00;$$

$$\$360.00 - \$306.00 = \$54.00;$$

$$\$54.00 \div \$360.00 = 15\%.$$



# Section 72.

Unit 17.

Part 72c - Review Assignment 72c.

Exercise 4 (for Part 72c),

and Exercises 1-3 (for Review Assignment 72c).

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$$\begin{aligned} 4-4. & \$175.00 - 20\% (\$35.00) = \$140.00; \\ & \$140.00 - 12\frac{1}{2}\% (\$17.50) = \$122.50; \\ & \$122.50 - \$98.00 = \$24.50; \\ & \$24.50 \div \$122.50 = 20\%. \end{aligned}$$

$$\begin{aligned} 4-5. & \$80.00 - 25\% (\$20.00) = \$60.00; \\ & \$60.00 - 10\% (\$6.00) = \$54.00; \\ & \$54.00 - \$48.60 = \$5.40; \\ & \$5.40 \div \$54.00 = 10\%. \end{aligned}$$

1. a. \$29.25 is 130% of \$22.50.
- b.  $55\frac{5}{8}$  is  $66\frac{2}{3}\%$  greater than  $33\frac{1}{2}$ .
- c. \$3.84 increased by  $\frac{3}{8}$  of itself equals \$5.28.
- d. \$7.56 is 5% more than \$7.20.

$$\begin{aligned} 2. & \$110.00 - 35\% (\$38.50) = \$71.50; \\ & \$71.50 - \$64.35 = \$7.15; \\ & \$7.15 \div \$71.50 = 10\%. \end{aligned}$$

$$\begin{aligned} 3. & \text{Materials:} && \$ 2.14 \\ & \text{Labor:} && 3.38 \\ & \text{Factory expense:} && .64 \\ & \text{Selling and administrative expense} \\ & \text{(20\% of \$6.16):} &+ & 1.23 \\ & \text{Total cost:} && \$ 7.39 \\ & \$7.39 + 10\% (\$.74) = \$8.13. \end{aligned}$$

$$4. \$21.25 - 37\frac{1}{2}\% (\$7.97) = \$13.28.$$



## Unit 17.

## Section 72.

Review Assignment 72c - General Review.  
Exercises 5-8 (for Review Assignment 72c),  
and Exercises 1-2 (for General Review).

448

Review Assignment  
72c (continued).

$$5. \$38.25 - 40\% (\$15.30) = \$22.95;$$

$$\$22.95 + 25\% (\$5.74) = \$28.69.$$

$$6. 100\% - 60\% = 40\%;$$

$$40\% \div 60\% = 66\frac{2}{3}\%.$$

$$7. \$136.00 - 15\% (\$20.40) = \$115.60;$$

$$\$115.60 - 10\% (\$11.56) = \$104.04;$$

$$\$104.04 \times 36\% (\$37.45) = \$141.49.$$

$$8. \$15,000 - \$3,000 = \$12,000;$$

$$1 + 2 + 3 + 4 + 5 = 15;$$

$$\frac{5}{15} \times \$12,000 = \$4,000;$$

$$\$15,000 - \$4,000 = \$11,000; \text{ (first year)}$$

$$\frac{2}{15} \times \$12,000 = \$3,200;$$

$$\$11,000 - \$3,200 = \$7,800; \text{ (second year)}$$

$$\frac{3}{15} \times \$12,000 = \$2,400;$$

$$\$7,800 - \$2,400 = \$5,400. \text{ (third year)}$$

General Review:

$$1. a. 5\frac{1}{4} + 3\frac{1}{3} + 18\frac{1}{2} + 9\frac{5}{8} = 5\frac{3}{12} + 3\frac{4}{12} + 18\frac{6}{12} + 9\frac{10}{12} = 35\frac{23}{12} = 36\frac{11}{12}$$

$$b. 3\frac{1}{4} - 1\frac{5}{8} = 3\frac{2}{8} - 1\frac{5}{8} = 1\frac{5}{8}$$

$$c. 56 \times 41\frac{1}{2} = 2,324.$$

$$d. 3\frac{2}{3} \div 3\frac{1}{7} = \frac{11}{3} \times \frac{7}{22} = \frac{7}{6} = 1\frac{1}{6}$$

$$e. 116.83 \times 4.9 = 572.467.$$

$$f. 1,760.64 \div 8.4 = 209.6.$$

$$g. 0.375 = \frac{375}{1,000} = \frac{3}{8}.$$

$$h. 2\frac{1}{2}\% = .025.$$

$$2. \text{Emmons: } 60\% (3 \times 20 = 60),$$

$$\text{Jarvis: } 40\% (2 \times 20 = 40).$$

$$60\% + 40\% = 100\%.$$

Section 72.  
General Review.  
Exercises 3-8.

Unit 16

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3.  $\$16,980 + \$17,540 + \$18,160 + \$17,800$   
 $+ \$17,145 = \$87,625;$   
 $\$17,500 \times 6 = \$105,000;$   
 $\$105,000 - \$87,625 = \$17,375.$

4.  $6 + 8 + 9 + 10\frac{1}{2} + 8 = 41\frac{1}{2};$   
 $\$9.00 \times 38 = \$342.00;$   
 $\$9.00 \times 1.5 = \$13.50;$   
 $\$13.50 \times 3.5 = \$47.25;$   
 $\$342.00 + \$47.25 = \$389.25.$

5.  $\$3,766 - \$188 = \$3,578;$   
 $\$3,578 \times 2\% = \$71.56;$   
 $\$200.00 + \$71.56 = \$271.56;$   
 $\$271.56 \times 6.13\% = \$16.65;$   
 $\$36.00 + \$16.65 + \$4.70 = \$57.35;$   
 $\$271.56 - \$57.35 = \$214.21.$

6.  $\$18,904 \times 5\% = \$945.20;$   
 $\$18,904 - \$14,000 = \$4,904;$   
 $\$4,904 \times 1\frac{1}{2}\% = \$73.56;$   
 $\$945.20 + \$73.56 = \$1,018.76;$   
 $\$1,100.00 + \$1,018.76 = \$2,118.76.$

7.  $\$23.35 \times 12 = \$280.20;$   
 $\$280.20 - \$250.00 = \$30.20.$

8.  $\$30.60 \times 10 = \$306.00;$   
 $\$306.00 + \$30.00 = \$336.00;$   
 $\$30.00 \div \$306.00 = 9.8\%.$

Unit 16.

Section 12.  
General Review.  
Exercises 9-14.

150

General Review  
(continued)

9.  $\$450.00 + 10\% (\$45.00) = \$495.00;$   
 $\$495.00 - \$50.00 = \$445.00;$   
 $\$445.00 \div \$22.25 = 20 \text{ months.}$

10.  $\$1,350.00 - 10\% (\$135.00) = \$1,215.00;$   
 $\$1,215.00 \div 15 = \$81.00.$

11.  $\$33.00 \times 12 = \$396.00;$   
 $\$396.00 + \$100.00 = \$496.00;$   
 $\$496.00 - \$450.00 = \$46.00;$   
 $\$450.00 - \$100.00 = \$350.00;$   
 $\$350.00 + \$35.00 = \$385.00;$   
 $\$396.00 - \$385.00 = \$11.00.$

12.  $\$1,000.00 \times 7\% = \$70.00;$   
 $\$70.00 \div \$875.00 = 8\%.$

13.  $80 \times \$32.25 = \$2,580.00;$   
 $\$2,580.00 + \$60.00 = \$2,640.00;$   
 $4 \times \$41.25 = \$165.00;$   
 $80 \times \$165.00 = \$13,200.00;$   
 $\$2,640 \div \$13,200 = 20\%.$

14. a.  $150 \text{ cm} \times 80 \text{ cm} = 12,000 \text{ cm}^2,$   
b.  $150 \text{ cm} \times 80 \text{ cm} = 120 \text{ m}^2.$



Section 72.  
General Review.  
Exercises 15-19.

Unit 16.

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15. Roger Hatt Reconciliation Statement July 1, 1981	
Checkbook balance: \$418.35	Bank statement balance: \$552.41
Less:	Less outstanding checks:
Service charge 1.80	#622 \$72.17
Sub-total: \$416.55	#623 8.64
Add: Deposit not recorded 32.66	#624 22.39
Correct checkbook balance: \$449.21	103.20
	Available bank balance: \$449.21

16.  $\$250 - \$200 = \$50$ ;  
 $\$50 \div 5\% = \$1,000$ ;  
 $\$1,800 + \$1,000 = \$2,800$ .

17.  $\$55,000 \times 80\% = \$44,000$ ;  
 $\$38,500 \div \$44,000 = 87\frac{1}{2}\%$ ;  
 $87\frac{1}{2}\% \times \$15,000 = \$13,125$ .

18.  $\$20.25 \div 3\% = \$675.00$ .

19.  $100\% - 10\% = 90\%$ ;  
 $\$67.95 \div 90\% = \$75.50$ .

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## Unit 17, Section 73.

1-1. a.  $\$495.00 \div 100 = \$4.95.$

b.  $\$5.50 - \$4.95 = \$.55.$

1-2.	Qty.	Item	Price	Ext.
	1	Desk	\$189.95	\$189.95
	1	Chair	89.50	89.50
	2	File Cabinets	134.50	269.00
	1	Supply Cabinet	99.75	99.75
	1	Lamp	29.25	29.25
	1	Letter Tray	9.95	9.95
	1	Typewriter	595.00	595.00
	1	Calculator	159.00	+159.00
		Total:		\$1,440.90

1-3. a.  $2,000 \times \$5.00 = \$10,000.00.$

b.  $\$10,000 + 22\%(\$2,200) = \$12,200.$

1-4. a.  $8,000 \times \$ .17 = \$1,360.00.$

b.  $\$1,360.00 \div \$4.00 = 340.$

1-5.  $120 \times \$ .72 = \$86.40;$

$\frac{2}{3} \times 120 = 80;$

$80 \times \$ .79 = \$63.20;$

$\$86.40 - \$63.20 = \$23.20.$

1-6. a.  $20 \times 30 = 600;$   $25 \times 30 = 750;$

$750 \div 500 = 1.5;$   $1.5 \times \$4.60 = \$6.90.$

b.  $600 \div 500 = 1.2;$   $1.2 \times \$4.60 = \$5.52;$

$\$6.90 - \$5.52 = \$1.38.$



Section 73.  
Exercises 1-3.

Unit 17.

453

1-7.  $\$38.00 \div 8 = \$4.75;$   
 $\$4.75 \times 12 = \$57.00.$

2-1. a.  $\$54,600 + \$7,800 = \$62,400;$   
 $\$62,400 \div 7,800 = \$8.$   
b.  $\$8 \times 80 = \$640.$

2-2. a.  $128 \times 4 = 512;$   
 $128 \times 5 = 640;$   
 $640 - 512 = 128.$   
b.  $128 \div 512 = 25\%.$   
c.  $6 \times \$9 = \$54;$   
 $\$54 \times 128 = \$6,912.$

2-3. a.  $\$224,775 \div 2,025 \text{ sq. met.} = \$111.$   
b.  $\$111 \times 16 = \$1,776.$

3-1.  $\$22,500 + \$1,440 + \$900 + \$3,216 = \$28,056;$   
 $\$28,056 \div 3 = \$9,352.$

3-2.  $40 \times \$4.80 = \$192.00;$   
 $\$192.00 \div 3 = \$64.00.$

3-3. a.  $180 \times 7\frac{1}{2} = 1,350.$   
b.  $\$4.50 \div 180 = \$0.025.$

4. a.  $300 \times \$0.03 = \$9.00.$   
b.  $300 \times \$0.006 = \$1.80;$   
c.  $\$1.80 + \$0.065 + \$0.15 = \$2.015 = \$2.02.$   
d.  $\$2.02 \div 300 = \$0.007,$   
e.  $\$0.030 - \$0.007 = \$0.023.$



## Unit 17.

Section 73 - Review Assignment 73.  
 Exercise 3 (for Section 73),  
 and Exercises 1-2 (for Review Assignment 73).

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Exercise 3  
(continued).

$$3-5. a. \$10,000 + \$465 + \$275 + \$500 + \$1,510 = \$12,750;$$

$$\$12,750 \div 5 = \$2,550.$$

$$b. \$2,550 \div 250 = \$10.20.$$

$$c. \$10.20 \times 5 = \$51.00; \$51.00 \div 150 = \$0.34.$$

$$3-6. \$130 + \$172 + \$138 + \$17 + \$15 + \$68 = \$540;$$

$$\$540 \div 100 = \$5.40.$$

$$3-7. 50 \times \$0.09 = \$4.50.$$

$$3-8. 3,400 + 3,300 + 3,800 = 10,500;$$

$$10,500 \div \$735 = \$14.29.$$

Review Assignment 73.

$$1. a. 16\frac{1}{2} \times 24\frac{1}{2} = \frac{129}{8} \times \frac{49}{2} = \frac{6,321}{16} = 395\frac{1}{16}.$$

$$b. 37\frac{1}{2} \div 3\frac{3}{4} = \frac{75}{2} \times \frac{4}{11} = \frac{150}{11} = 13\frac{7}{11}.$$

$$c. 3.625 = 362\frac{1}{2}\%.$$

$$d. 3 \times 1.9 \times 4.72 = 26.904.$$

$$e. \text{July 5 to October 10: 97 days.}$$

$$f. \$800.00 \times 5\% (\$40.00) \text{ for 45 days} = \$5.00.$$

Qty.	Item	Price	Ext.
42 reams	Paper	\$4.50	\$189.00
32 pkg.	Stencils	5.10	163.20
5 lbs.	Ink	4.95	24.75
10 bottles	Correction fluid	.95	9.50
2 boxes	Staples	1.15	+ 2.30
Total:			\$388.75

$$\$388.75 \div 25 = \$15.55.$$

# Sections 73-74.

Unit 17.

Review Assignment 73- Part 74a.

Exercises 3-7 (for Review Assignment 73),  
and Exercise 1 (for Part 74a).

455

3.  $4,200 \div 105 = 40$ ;

$40 \times \$5.00 = \$200.00$ .

4.  $\$3,468.50 \times 8\% = \$277.48$ ;

$\$277.48 + \$189.68 = \$467.16$ ;

$\$3,468.50 - \$467.16 = \$3,001.34$ .

5. a.  $12m \times 36m = 432m^2$ ;

b.  $432m^2 - 4\% (.17m^2) = 414.72m^2$ ;

c.  $\$18 \times 414.72m^2 = \$7,464.96$ .

6.  $\$80.00 - 30\% (\$24.00) = \$56.00$ ;

$\$49.00 \div \$56.00 = 87.5\%$ ;

$100\% - 87.5\% = 12.5\%$ .

7.  $\$10.44 + 18\% (\$1.88) = \$12.32$ ;

$\$12.32 + 10\% (\$1.23) = \$13.55$ .

## Section 74.

1.	Investments						Net Income
	Partner A		Partner B		Partner C		
	\$5,500	\$2,400	\$16,500	\$7,200			\$9,600
	16,000	3,200	24,000	4,800			8,000
	52,000	8,060	28,000	4,340			12,400
	13,500	3,870	24,000	6,880			10,750
	9,000	4,050	27,000	12,150	\$36,000	\$16,200	32,400
	24,000	10,832	18,000	8,124	12,000	5,416	24,372



## Unit 17.

## Section 74.

## Part 74a-Review Assignment 74a.

## Exercise 1 (for Part 74a),

## and Exercises 1-3 (for Review Assignment 74a).

456

Exercise 1  
(continued).

$$1-2. \quad \$12,000 + \$20,000 = \$32,000;$$

$$\frac{\$12,000}{\$32,000} \times \$12,560 = \$4,710 \text{ (Kerry)};$$

$$\frac{\$20,000}{\$32,000} \times \$12,560 = \$7,850 \text{ (Minor)}.$$

$$1-3. \quad \$27,500 + \$22,500 = \$50,000;$$

$$\frac{\$27,500}{\$50,000} \times \$12,240 = \$6,732 \text{ (McHugh)};$$

$$\frac{\$22,500}{\$50,000} \times \$12,240 = \$5,508 \text{ (Chang)}.$$

$$1-4. \quad \$16,000 + \$20,000 + \$24,000 = \$60,000;$$

$$\$98,700 + \$40,340 = \$139,040;$$

$$\$160,400 - \$139,040 = \$21,360;$$

$$\frac{\$16,000}{\$60,000} \times \$21,360 = \$5,696 \text{ (Lynn)};$$

$$\frac{\$20,000}{\$60,000} \times \$21,360 = \$7,120 \text{ (Roland)};$$

$$\frac{\$24,000}{\$60,000} \times \$21,360 = \$8,544 \text{ (Haze)}.$$

Review Assignment  
74a.

$$1. \text{ a. } 1.375 = 137\frac{1}{2}\%.$$

$$\text{b. } 16\% = \frac{16}{100} = \frac{4}{25}.$$

$$\text{c. } \frac{5}{200} = \frac{2\frac{1}{2}}{100} = 2\frac{1}{2}\%.$$

d. Due date of 70-day note dated December 9;  
February 17.

e. May 7 to August 28: 113 days.

$$2. \quad \$18,000 + \$24,000 + \$30,000 = \$72,000;$$

$$\$62,400 - \$39,600 = \$22,800;$$

$$\frac{\$18,000}{\$72,000} \times \$22,800 = \$5,700 \text{ (Abel)};$$

$$\frac{\$24,000}{\$72,000} \times \$22,800 = \$7,600 \text{ (Byers)};$$

$$\frac{\$30,000}{\$72,000} \times \$22,800 = \$9,500 \text{ (Cain)}.$$

$$3. \quad 25 \times 5 = 125; \$5.25 \div 60 = \$.0875;$$

$$\$0.0875 \times 12 = \$1.05; \$1.05 \times 125 = \$131.25.$$



# Section 74.

Review Assignment 74a - Part 74b.

Exercises 4-7 (for Review Assignment 74a),  
and Exercise 2 (for Part 74b).

Unit 17.

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$$\begin{aligned} 4. \quad & \$60.00 - \$37.50 = \$22.50; \\ & \$22.50 \div \$37.50 = 60\%; \\ & \$45.00 + 60\% (\$27.00) = \$72.00. \end{aligned}$$

$$5. \quad \$3,446.80 \div \$12,310.00 = 28\%.$$

$$\begin{aligned} 6. \quad & 100 \times \$7.60 = \$760.00 \\ & 100 \times 7.00 = 700.00 \\ & 300 \times 6.50 = 1,950.00 \\ & \quad \quad \quad \$3,410.00 \\ & 500 \times \$ .70 = \$350.00; \\ & \$350.00 + \$225.00 = \$575.00; \\ & \$3,410.00 - \$575.00 = \$2,835.00; \\ & \$2,835.00 \div 500 = \$5.67. \end{aligned}$$

$$\begin{aligned} 7. \quad & \$31.50 - 40\% (\$12.60) = \$18.90; \\ & \$18.90 + 25\% (\$4.72) = \$23.63. \end{aligned}$$

Investments							Net Income for the Year
Partner A		Partner B		Partner C		Interest	
\$15,000	\$4,670	\$8,000	\$4,180			7%	\$ 8,850
20,000	5,350	30,000	5,950	\$25,000	\$5,650	6%	16,950
37,500	8,200	32,000	7,925	26,500	7,650	5%	23,775

$$\begin{aligned} 2. \quad & 7\frac{1}{2}\% \text{ of } \$35,000 = \$2,625; \\ & 7\frac{1}{2}\% \text{ of } \$25,000 = \$1,875; \\ & \$2,625 + \$1,875 = \$4,500; \\ & \$15,700 - \$4,500 = \$11,200; \\ & \$11,200 \div 2 = \$5,600; \\ & \$2,625 + \$5,600 = \$8,225; \\ & \$1,875 + \$5,600 = \$7,475. \end{aligned}$$

## Unit 17.

Section 74.  
Part 74b.  
Exercises 2-3.

458

Part 74b  
(continued).

$$2-3. \quad 8\% \text{ of } \$28,000 = \$2,240; \quad 8\% \text{ of } \$42,000 = \$3,360;$$

$$\$2,240 + \$3,360 = \$5,600; \quad \$87,684 - \$5,600 = \$82,084;$$

$$\$82,084 \div 2 = \$41,042;$$

$$\$2,240 + \$41,042 = \$43,282; \quad \$3,360 + \$41,042 = \$44,402.$$

$$2-4. \quad 6\% \text{ of } \$8,500 = \$510; \quad 6\% \text{ of } \$12,000 = \$720;$$

$$6\% \text{ of } \$25,000 = \$1,500; \quad \$510 + \$720 + \$1,500 = \$2,730;$$

$$\$56,530 - \$52,550 = \$25,980; \quad \$25,980 - \$2,730 = \$23,250;$$

$$\$23,250 \div 3 = \$7,750;$$

$$\$510 + \$7,750 = \$8,260; \quad \$720 + \$7,750 = \$8,470; \quad \$1,500 + \$7,750 = \$9,250.$$

$$2-5. \quad 7\% \text{ of } \$125,000 = \$8,750; \quad 7\% \text{ of } \$75,000 = \$5,250;$$

$$7\% \text{ of } \$50,000 = \$3,500; \quad \$8,750 + \$5,250 + \$3,500 = \$17,500;$$

$$10\% \text{ of } \$340,000 = \$34,000; \quad \$34,000 - \$17,500 = \$16,500;$$

$$\$16,500 \div 3 = \$5,500;$$

$$\$8,750 + \$5,500 = \$14,250; \quad \$5,250 + \$5,500 = \$10,750; \quad \$3,500 + \$5,500 = \$9,000.$$

$$3-1. \quad \$27,672 \div 8 = \$3,459$$

$$5 \times \$3,459 = \$17,295 \text{ (Adler)}; \quad 3 \times \$3,459 = \$10,377 \text{ (Baron)}.$$

$$3-2. \quad \$221,760 + \$36,280 = \$258,040;$$

$$\$274,690 - \$258,040 = \$16,650;$$

$$45\% \text{ of } \$16,650 = \$7,492.50 \text{ (Smith)};$$

$$55\% \text{ of } \$16,650 = \$9,157.50 \text{ (Johnson)}.$$

$$3-3. \quad \$900 \times 12 = \$10,800; \quad \$10,800 \times 2 = \$21,600;$$

$$\$24,000 + \$36,000 = \$60,000;$$

$$\$24,000 \div \$60,000 = 40\%; \quad \$36,000 \div \$60,000 = 60\%;$$

$$\$28,750 - \$21,600 = \$7,150; \quad 40\% \text{ of } \$7,150 = \$2,860;$$

$$\$10,800 + \$2,860 = \$13,660 \text{ (Hicks)};$$

$$\$7,150 - \$2,860 = \$4,290; \quad \$10,800 + \$4,290 = \$15,090$$

(O'Neil).



# Section 74.

Unit 17.

Part 74b - Review Assignment 74b.

Exercise 3 (for Part 74b),

and Exercises 1-5 (for Review Assignment 74b).

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$$3-4 \quad 6\% \text{ of } \$18,000 = \$1,080; \quad 6\% \text{ of } \$26,000 = \$1,560;$$

$$\$1,080 + \$1,560 = \$2,640; \quad \$18,400 + \$1,080 = \$19,480;$$

$$\$17,200 + \$1,560 = \$18,760; \quad \$19,480 + \$18,760 = \$38,240;$$

$$\$53,900 - \$38,240 = \$15,660; \quad \$15,660 \div 2 = \$7,830;$$

$$\$7,830 + \$19,480 = \$27,310 \text{ (Nagel)}; \quad \$7,830 + \$18,760 = \$26,590 \text{ (Sabin)}.$$

$$3-5. \quad \$1,000 \times 12 = \$12,000; \quad \$1,250 \times 12 = \$15,000;$$

$$\$20,000 + \$35,000 = \$55,000;$$

$$\$125,000 - \$27,000 = \$98,000; \quad \$98,000 \div 2 = \$49,000;$$

$$\$12,000 + \$49,000 = \$61,000 \text{ (Kinnett)};$$

$$\$15,000 + \$49,000 = \$64,000 \text{ (Young)}.$$

$$1. \quad a. \quad 80\frac{1}{4} \times 21\frac{1}{2} = \frac{321}{4} \times \frac{43}{2} = \frac{13,803}{8} = 1,725\frac{3}{8}$$

$$b. \quad 8\frac{1}{3} \div 12\frac{1}{2} = \frac{25}{3} \times \frac{2}{25} = \frac{2}{3}.$$

$$c. \quad 250\% \text{ is equal to } 2.5.$$

$$d. \quad .75\% \text{ is equal to } \frac{3}{400}.$$

$$e. \quad 344\text{m}^2 \text{ increased by } 25\% = 430\text{m}^2.$$

$$2. \quad \$25,000 + \$35,000 = \$55,000;$$

$$6\% \text{ of } \$25,000 = \$1,500; \quad 6\% \text{ of } \$35,000 = \$2,100;$$

$$\$1,500 + \$2,100 = \$3,600; \quad \$49,470 - \$3,600 = \$45,870;$$

$$\$45,870 \div 2 = \$22,935;$$

$$\$22,935 + \$1,500 = \$24,435 \text{ (Arant)}; \quad \$22,935 + \$2,100 = \$25,035 \text{ (Dob)}.$$

$$3. \quad \$2,600 + \$900 + \$2,800 = \$6,300;$$

$$\$6,300 \div 16,000 = 39\phi.$$

$$4. \quad \$5.00 + 20\% (\$1.00) = \$6.00;$$

$$500 \div 100 = 5; \quad \$6.00 \div 5 = \$1.20.$$

$$5. \quad \$14,960 \div \$27,200 = 55\phi.$$

## Unit 17.

## Sections 74-75.

Review Assignment 74b - Section 75.

Exercises 6-9 (for Review Assignment 74b),  
and Exercise 1 (for Section 75).

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Review Assignment 74b (continued).

$$6. \quad \$2,745.00 \times 6\% = \$164.70;$$

$$\$164.70 + \$98.46 = \$263.16;$$

$$\$2,745.00 + \$263.16 = \$3,008.16.$$

$$7. \quad \text{March 25 to April 9: 15 days.}$$

$$\$4,800 \times 10\% (\$480) \text{ for 90 days} = \$120;$$

$$\$120 \div 6 = \$20; \quad \$20 \times 5 = \$100;$$

$$\$4,800 - \$100 = \$4,700.$$

$$8. \quad 1.6\% = \frac{16}{1,000} = \frac{2}{125}.$$

$$9. \quad \$180.00 + 16\frac{2}{3}\% (\$30.00) = \$210.00.$$

## Section 75.

$$\text{Section 75. 1-1. } \$64,000 \div \$400,000 = 16\%.$$

$$1-2. \quad \$8,250 \div \$165,000 = 5\%.$$

$$1-3. \quad \$39,000 \div \$600,000 = 6.5\%.$$

$$1-4. \quad \$2,475 \div 4,500 = 55\%.$$

$$1-5. \quad \$43,200 \div 32,000 = \$1.35.$$

$$1-6. \quad a. \quad 75\% \text{ of } \$114,000 = \$85,500;$$

$$9,500 \times \$100 = \$950,000;$$

$$\$85,500 \div \$950,000 = 9\%.$$

$$b. \quad \$85,500 \div 9,500 = \$9.00.$$

$$1-7. \quad 6\% \text{ of } \$50,000 = \$3,000;$$

$$\$20,000 \div \$200,000 = 10\%.$$



Section 75.  
Exercises 2-3.

Unit 17.

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2-1.	Capital Stock		Total	Net	Dividend		Kept in
	Shares	Par Value	Par Value		Rate	Total Paid	Retained Earnings Account
a.	3,000	\$100	\$300,000	\$26,435	7%	\$21,000	\$5,435
b.	1,700	100	170,000	14,784	5%	8,500	6,284
c.	1,350	100	135,000	12,623	6%	8,100	4,523
d.	2,225	100	225,000	23,509	8%	18,000	5,509
e.	5,250	50	262,500	22,425	6%	15,750	6,675
f.	3,450	25	86,250	7,234	4%	3,450	3,784

2-2.  $\$20,132 - \$12,250 = \$7,882.$

2-3.  $7\% \text{ of } \$650,000 = \$45,500;$   
 $\$52,981 - \$45,500 = \$7,481.$

2-4.  $145,000 \times \$ .18 = \$26,100;$   
 $\$350,000 - \$26,100 = \$323,900.$

2-5.  $3,000 \times \$100 = \$300,000;$   
 $60,000 \times \$10 = \$600,000;$   
 $\$300,000 \times 5\% = \$15,000;$   
 $\$600,000 \times \$ .45 = \$270,000;$   
 $\$67,916.47 - \$15,000.00 = \$52,916.47.$

3-1.  $\$25.00 \times 5 = \$125.00;$   
 $6\% \text{ of } \$125.00 = \$7.50;$   
 $\$635.00 \times 5\% = \$31.75;$   
 $\$31.75 + \$7.50 = \$39.25.$

Unit 17.

Section 75 - Review Assignment 75.  
Exercises 3 (for Section 75),  
and Exercises 1-3 (for Review Assignment 75).

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Exercise 3  
(continued)

3-2.  $15 \times \$20.00 = \$300.00$ ;  
 $\$300.00 \times 5\% = \$15.00$ ;  
 $\$983.00 \times 3\% = \$29.49$ ;  
 $\$15.00 + \$29.49 = \$44.49$ .

3-3.  $35 \times \$5.00 = \$175.00$ ;  
 $\$175.00 \times 4\% = \$7.00$ ;  
 $\$1,624.00 \times 3\% = \$48.72$ ;  
 $\$7.00 + \$48.72 = \$55.72$ .

3-4.  $25 \times \$10.00 = \$250.00$ ;  
 $\$250.00 \times 5\frac{1}{2}\% = \$13.75$ ;  
 $\$485.00 \times 4\% = \$19.40$ ;  
 $\$13.75 + \$19.40 = \$33.15$ .

Review Assignment  
75.

1. corporation: (b) Owned by several people legally acting as one under a charter.  
partnership: (c) Owned by two or more persons, without a charter.  
rate of dividend: (d) Dividend divided by par value.  
sole proprietorship: (a) Owned by one person.

2.  $6,500 \times \$100 = \$650,000$ ;  
 $5\% \text{ of } \$650,000 = \$32,500$ ;  
 $\$62,328 - \$32,500 = \$29,828$ .

3.  $8,750 \times \$100 = \$875,000$ ;  
 $\$122,500 \div \$875,000 = 14\%$ .



Section 75.

Review Assignment 75.

Exercises 4-10.

Unit 17.

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4.  $\$28,000 + \$32,000 + \$40,000 = \$100,000$ ;

Carew:  $\$28,000 \div \$100,000 = 28\%$ ;  $28\% \text{ of } \$32,500 = \$9,100$ .

Dane:  $\$32,000 \div \$100,000 = 32\%$ ;  $32\% \text{ of } \$32,500 = \$10,400$ .

Ford:  $\$40,000 \div \$100,000 = 40\%$ ;  $40\% \text{ of } \$32,500 = \$13,000$ .

5. a.  $50 \times 18 = 900$ ;  $900 \div 500 = 1.8$ ;

$\$5.78 \times 1.8 = \$10.40$ ;  $\$4.48 \times 9 = \$40.32$ ;

$\$10.40 + \$40.32 = \$50.72$ .

b.  $\$50.72 \div 50 = \$1.01$ .

6. September 12 to December 1: 80 days.

$\$1,800.00 \times 12\% (\$216.00) \text{ for 80 days} = \$48.00$ ;

$\$1,800.00 + \$48.00 = \$1,848.00$ .

7.  $\$807,710 \div \$11,201,000 = 0.0721$ ;

$0.0721 \times \$100.00 = \$7.21$ .

8.  $\$985.00 \times 10\% (\$98.50) \text{ for 90 days} = \$24.62$ ;

$\$985.00 - \$24.62 = \$960.38$ .

9. April 26 to May 26: 30 days;

$\$2,000 - 9\% (\$180.00) = \$1,820$ ;

$\$1,820 \times 10\% (\$182) \text{ for 30 days} = \$15.17$ ;

$\$15.17 \div 12 = \$1.26$ ;  $\$1.26 \times 2 = \$2.52$ ;

$\$1,820.00 - \$2.52 = \$1,817.48$ .

10.  $100\% - 20\% = 80\%$ ;

$\$42.00 \div 80\% = \$52.50$ ;

11.  $30\% + 8\% = 38\%$ ;  $100\% - 38\% = 62\%$ ;

$\$14.57 \div 62\% = \$23.50$ .

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## Section 76.

$$1-1. \quad 2,100 \div 100 = 21;$$

$$\quad \quad \quad \$2.50 \div 100 = \$2.50.$$

$$1-2. \quad \$1,440 \times 5\% = \$72.00; \text{ (Poultry)}$$

$$\quad \quad \quad \$1,440 \times 40\% = \$576.00; \text{ (Livestock)}$$

$$\quad \quad \quad \$1,440 \times 40\% = \$576.00; \text{ (Grain)}$$

$$\quad \quad \quad \$1,440 \times 15\% = \$216.00. \text{ (Dairy Products)}$$

$$1-3. \quad \$1,860 \times 12\% = \$223.20; \text{ (Poultry)}$$

$$\quad \quad \quad \$1,860 \times 60\% = \$1,116.00; \text{ (Livestock)}$$

$$\quad \quad \quad \$1,860 \times 12\% = \$223.20; \text{ (Grain)}$$

$$\quad \quad \quad \$1,860 \times 16\% = \$297.60. \text{ (Dairy Products)}$$

$$2-1. \quad \$12,540 + \$1,440 + \$2,100 + \$480$$

$$\quad \quad \quad + \$1,620 + \$660 = \$18,840;$$

$$\quad \quad \quad 25,500 \div 100 = 255; \quad 61,500 \div 100 = 615;$$

$$\quad \quad \quad \$58 \times 255 = \$14,790; \quad \$63 \times 615 = \$38,745;$$

$$\quad \quad \quad \$18,840 + \$14,790 = \$33,630; \quad \$38,745 - \$33,630 = \$5,115.$$

$$2-2. \quad 7,500 + 21\% (1,575) = 9,075.$$

$$2-3. \quad \text{Corn: } 1,000 \times 115 = 115,000; \quad 115,000 \times \$2.55 = \$293,250;$$

$$1,000 \times \$285 = \$285,000; \quad \$293,250 - \$285,000 = \$8,250.$$

$$\text{Soybeans: } 1,000 \times 37 = 37,000; \quad 37,000 \times \$6.80 = \$251,600;$$

$$1,000 \times \$240 = \$240,000; \quad \$251,600 - \$240,000 = \$11,600.$$

$$\text{Soybeans gets more net income; } \$11,600 - \$8,250 = \$3,350.$$

$$2-4. \quad a. \quad 51,600 \div 1,200 = 43;$$

$$\quad \quad \quad b. \quad 51,600 \times \$6.80 = \$350,880.$$



Section 76 - Review Assignment 76,  
Exercise 2 (for Section 76),  
and Exercise 2 (for Review Assignment 76).

Unit 17

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2-5.  $100 \times \$2.55 = \$255.00$ ;  
 $352 \div 88 = 4$ ;  $352 \times \$1.16 = \$56.32$ ;  
 $18,000 \div 12 = 1,500$ ;  $1,500 \times \$1.55 = \$825.00$ ;  
 $\$56.32 + \$825.00 = \$881.32$ ;  
 $\$881.32 - \$255.00 = \$626.32$ .

2-6. a.  $1,350 \times \$1.90 = \$2,565.00$ ;  
b.  $\$2,565.00 \div 150 = \$17.10$ .

2-7.  $8\% \text{ of } \$6,880.00 = \$550.40$ ;  
 $\$550.40 + \$479.60 = \$1,030.00$ ;  
 $\$6,880.00 - \$1,030.00 = \$5,850.00$ ;  
 $\$5,850.00 \div 1,500 = \$3.90$ .

2-8.  $8,950 \div 100 = 89.50$ ;  
 $89.50 \times \$10.50 = \$939.75$ ;  
 $\$939.75 + 4\% (\$37.59) = \$977.34$ .

2-9. a.  $\$12,805.80 \div 235,600 = 5.4\%$ ;  
b.  $5.4\% \times 3,265 = \$177.47$ .

1.  $\$98.40 + \$106.00 + \$84.00 + \$52.50$   
 $+ \$85.40 + \$18.70 = \$445.00$ ;  
 $\$445.00 \div 250 = \$1.78$ .

2.  $8,200 \times \$100 = \$820,000$ ;  
 $6\% \text{ of } \$188,600 = \$11,316$ ;  
 $\$820,000 - \$11,316 = \$808,684$ .

## Unit 17.

## Section 76.

Review Assignment 76 - General Review:  
Exercises 3-7 (for Review Assignment 76),  
and Exercise 1 (for General Review).

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Review Assignment  
76 (continued).

$$3. \quad 7\frac{1}{2}\% \text{ of } \$50,000 = \$3,750; \quad 7\frac{1}{2}\% \text{ of } \$20,000 = \$1,500;$$

$$\$3,750 + \$1,500 = \$5,250; \quad \$28,000 - \$5,250 = \$22,750;$$

$$\$22,750 \div 2 = \$11,375;$$

$$\$3,750 + \$11,375 = \$15,125 \text{ (Mendez)};$$

$$\$1,500 + \$11,375 = \$12,875 \text{ (Trudo)}.$$

$$4. \quad \$290.00 - \$250.00 = \$40.00;$$

$$\$40.00 \div \$250.00 = 16\%.$$

$$5. \quad \$150,000 - \$125,000 = \$25,000;$$

$$\$25,000 \div \$125,000 = 20\%;$$

$$\$150,000 + 20\% (\$30,000) = \$180,000.$$

$$6. \quad \text{Dealer A: } \$450.00 - 33\frac{1}{3}\% (\$150.00) = \$300.00;$$

$$\$300.00 - 20\% (\$60.00) = \$240.00;$$

$$\text{Dealer B: } \$500.00 - 30\% (\$150.00) = \$350.00;$$

$$\$350.00 - 20\% (\$70.00) = \$280.00;$$

$$\$280.00 - 10\% (\$28.00) = \$252.00.$$

$$\$252.00 - \$240.00 = \$12.00; \text{ Dealer A has better offer.}$$

$$7. \quad \$635.00 \times 9\% (\$57.15) \text{ for 40 days} = \$6.35;$$

$$\$1,341.16 - \$6.35 = \$1,334.81.$$

General  
Review.

$$1. \quad a. \quad 9\frac{2}{3} + 12\frac{5}{6} + 5\frac{4}{9} + 11\frac{1}{2} = 9\frac{12}{18} + 12\frac{15}{18} + 5\frac{8}{18} + 11\frac{9}{18} = 37\frac{44}{18} = 39\frac{4}{9}.$$

$$b. \quad 3\frac{1}{4} - 1\frac{9}{16} = 3\frac{4}{16} - 1\frac{9}{16} = 1\frac{7}{16}.$$

$$c. \quad 76\frac{1}{3} \times 6\frac{1}{4} = \frac{229}{3} \times \frac{25}{4} = \frac{5725}{12} = 477\frac{1}{12}.$$

$$d. \quad 12\frac{1}{4} \div 5\frac{3}{5} = \frac{49}{4} \times \frac{5}{28} = \frac{35}{16} = 2\frac{3}{16}.$$

$$e. \quad 265.1 \times 10.4 = 2,757.04.$$

$$f. \quad 30,732 \div 118.2 = 26.$$

$$g. \quad \frac{3}{20} = \frac{15}{100} = 15\%.$$

$$h. \quad 0.625 = \frac{625}{1,000} = \frac{5}{8}.$$

$$i. \quad 0.029 = \frac{29}{1,000} = 2.9\%.$$

$$j. \quad 4\frac{1}{2}\% = .045.$$



Section 76.  
General Review.  
Exercises 2-5.

Unit 17.

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2.

Donna Tyler Reconciliation Statement September 30, 1981			
Checkbook balance:	\$ 361.16	Bank statement balance:	\$ 481.63
Less:		Less outstanding checks:	
Service charge	<u>1.72</u>	#627	\$ 41.82
		#628	72.15
		#629	8.22
			<u>122.19</u>
Correct checkbook balance:	\$ 359.44	Available bank balance:	\$ 359.44

3.  $\$1,231 \times 10 = \$12,310;$   
 $\$991 + \$1,047 + \$1,278 = \$3,316;$   
 $\$12,310 + \$3,316 = \$15,626;$   
 $\$15,626 \div 13 = \$1,202.$

4.  $\$.45 \times 12 = \$5.40; \$5.40 \times 40 = \$216;$   
 $\$1,621.00 + \$216.00 = \$1,837.00;$   
 $\$1,837.00 - \$1,702.00 = \$135.00.$

5.  $2:45 (14:45) - 9:15 = 5:30;$   
 $5:30 - 1:15 = 4:15;$   
 $187 \div 255 = .73;$   
 $.73 \times 60 = 44 \text{ mph.}$

## Unit 17.

Section 76.  
General Review:  
Exercises 6-11.

468

General Review  
(Continued).

6.  $101,200 - 89,900 = 11,300;$

$11,300 \div 100 = 113;$

$113 \times \$ .27 = \$ 30.51;$

$\$ 30.51 + 5\% (\$ 1.53) = \$ 32.04.$

7.  $\$ 46,000 - \$ 10,000 = \$ 36,000;$

$6\% \text{ of } \$ 10,000 = \$ 600; 9\% \text{ of } \$ 36,000 = \$ 3,240;$

$\$ 3,240 - \$ 600 = \$ 2,640; \$ 2,640 + \$ 3,200 = \$ 5,840;$

$\$ 500 \times 12 = \$ 6,000; \$ 6,000 - \$ 5,840 = \$ 160 \text{ (lost).}$

8.  $\$ 829,180.00 \div \$ 11,340,000 = 0.0731;$

$0.0731 \times \$ 1,000 = \$ 73.12.$

9. Wolfe Bros.  $\$ 1,100.00 - 10\% (\$ 110.00) = \$ 990.00;$

$\$ 990.00 - 10\% (\$ 99.00) = \$ 891.00.$

Dell Company:  $\$ 1,200.00 - 25\% (\$ 300.00) = \$ 900.00;$

$\$ 900.00 - 2\% (\$ 6.00) = \$ 894.00.$

$\$ 894.00 - \$ 891.00 = \$ 3.00; \text{Wolfe Bros. has better offer.}$

10.  $\$ 1,240 - 5\% (\$ 62) = \$ 1,178.00;$

$\$ 1,240 \times 9\% (\$ 111.60) \text{ for 90 days} = \$ 27.90;$

$\$ 1,240.00 - \$ 27.90 = \$ 1,212.10.$

$\$ 1,212.10 - \$ 1,178.00 = \$ 34.10.$

11.  $\$ 32,000 + \$ 28,000 + \$ 20,000 = \$ 80,000;$

$\$ 32,000 \div \$ 80,000 = 40\% \text{ (Endicott);}$

$\$ 28,000 \div \$ 80,000 = 35\% \text{ (Farley);}$

$\$ 20,000 \div \$ 80,000 = 25\% \text{ (Mering).}$



Section 76.  
General Review.  
Exercises 12-17.

Unit 17.

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$$12. \$2,142 + \$413 = \$2,555;$$

$$\$2,555 - \$2,437 = \$118.$$

$$13. \$17.50 + 44\% (\$7.70) = \$25.20.$$

$$14. \$1,761.20 \times 8\% = \$140.90;$$

$$\$140.90 + \$92.48 + \$67.25 + \$8.66 = \$309.29.$$

$$\$1,761.20 - \$309.29 = \$1,451.91.$$

$$15. \$16.20 \times 20 = \$324.00;$$

$$\$324.00 - 5\% (\$16.20) = \$307.80;$$

$$20 \times 24 = 480;$$

$$\$307.80 \div 480 = \$.64;$$

$$\$ .64 + 33\frac{1}{3}\% (\$.21) = \$.85.$$

$$16. 15 \times 24 = 360;$$

$$\$4.90 \times 15 = \$73.50;$$

$$360 - 20 = 340;$$

$$340 \div 2 = 170;$$

$$170 \times \$ .59 = \$100.30;$$

$$\$100.30 - \$73.50 = \$26.80;$$

$$\$26.80 \div \$73.50 = 36.5\%.$$

$$7. 40 \times \$15.00 = \$600.00;$$

$$\$600.00 - 30\% (\$180.00) = \$420.00,$$

$$20 \times \$18.50 = \$370.00;$$

$$15 \times \$16.00 = \$240.00;$$

$$5 \times \$14.00 = \$70.00,$$

$$\$370.00 + \$240.00 + \$70.00 = \$680.00;$$

$$\$600.00 + 33\% (\$198.00) = \$798.00;$$

$$\$798.00 \div 40 = \$19.95;$$

$$\$19.95 - \$15.00 = \$4.95.$$

## Unit 17.

Section 76.  
General Review:  
Exercises 18-20.

470

General Review  
(continued)

18.  $5\%$  of  $\$35,000 = \$1,750$ ;  
 $5\%$  of  $\$30,000 = \$1,500$ ;  
 $5\%$  of  $\$25,000 = \$1,250$ ;  
 $\$1,750 + \$1,500 + \$1,250 = \$4,500$ ;  
 $\$43,620 - \$4,500 = \$39,120$ ;  $\$850 \times 12 = \$10,200$ ;  
 $\$39,120 \div 3 = \$13,040$ ;  
 $\$1,750 + \$10,200 + \$13,040 = \$24,990$  (Bell);  
 $\$1,500 + \$10,200 + \$13,040 = \$24,740$  (Cristo);  
 $\$1,250 + \$10,200 + \$13,040 = \$24,490$  (Larsen).

19.  $3,000 + 1,000 + 2,400 + 1,600 = 8,000$  sq. ft.  
Department A:  $3,000 \div 8,000 = 0.375$ ;  $0.375 \times \$7,200 = \$2,700$ ;  
Department B:  $1,000 \div 8,000 = 0.125$ ;  $0.125 \times \$7,200 = \$900$ ;  
Department C:  $2,400 \div 8,000 = 0.3$ ;  $0.3 \times \$7,200 = \$2,160$ ;  
Department D:  $1,600 \div 8,000 = 0.2$ ;  $0.2 \times \$7,200 = \$1,440$ .

20.

Erica Mull  
Reconciliation Statement  
April 30, 1981

Checkbook balance:	\$ 914.02	Bank statement balance:	\$ 809.30
Less:		Less outstanding checks:	
U.S. Savings Bond	18.75	#52	\$ 21.48
		#58	17.55
			39.03
		Sub-total:	\$ 770.27
		Add: Deposit not recorded	125.00
Correct checkbook balance:	\$895.27	Available bank balance:	\$895.27



21. In Account With Audrey Elting

Date	Withdrawal	Deposit	Interest	Balance
Jan. 2 <sup>1981</sup>		\$850.00	\$ 12.75	\$ 850.00
Apr. 1			\$ 12.75	862.75
July 1		475.00	20.07	1,357.82
Oct. 1			20.37	1,378.19

6% interest a year

22.  $\$28.00 - 25\% (\$7.00) = \$21.00;$   
 $\$21.00 - 10\% (\$2.10) = \$18.90;$   
 $\$18.90 + \$ .60 = \$19.50;$   
 $\$19.50 + 35\% (\$6.83) = \$26.33.$

23.  $\$32.00 - 25\% (\$8.00) = \$24.00;$   
 $\$24.00 + \$1.16 = \$25.16;$   
 $24\% + 8\% = 32\%;$   
 $100\% - 32\% = 68\%;$   
 $\$25.16 \div 68\% = \$37.00.$

24.  $\$31.25 + 40\% (\$12.50) = \$43.75.$

25.  $50 \times \$4.35 = \$217.50;$   
 $\$217.50 + 60\% (\$130.50) = \$348.00;$   
 $\$348.00 \div 50 = \$6.96;$   
 $\$6.96 \times 40 = \$278.40;$   
 $\$278.40 + 50\% (\$139.20) = \$417.60;$   
 $\$417.60 \div 50 = \$8.35.$

26.  $\$50.00 - 20\% (\$10.00) = \$40.00;$   
 $\$40.00 - \$34.00 = \$6.00;$   
 $\$6.00 \div \$40.00 = 15\%.$

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## Unit 18, Section 77.

1-1. 4 ten-thousands.

a. 2 thousands

b. 6 hundreds.

c. 8 tens.

d. 3 ones.

1-2. a. 7 is in the thousands' place.

b. 5 is in the hundreds' place

c. 8 is in the tens' place.

d. 4 is in the ones' place.

1-3. a. 3 has the value of 3,000.

b. 6 has the value of 600.

c. 2 has the value of 20.

d. 9 has the value of 9.

1-4. a.  $456 = 400 + 50 + 6$ .b.  $9,475 = 9,000 + 400 + 70 + 5$ .c.  $4,307 = 4,000 + 300 + 7$ .d.  $7,540 = 7,000 + 500 + 40$ .e.  $8,002 = 8,000 + 2$ .f.  $12,823 = 10,000 + 2,000 + 800 + 20 + 3$ .g.  $12,000 = 10,000 + 2,000$ .h.  $234,451 = 200,000 + 30,000 + 4,000 + 400 + 50 + 1$ .

1-5. a. 432 is the largest number.

b. 234 is the smallest number.

1-6. a. 753 is the largest number.

b. 357 is the smallest number.



Sections 77-78.  
Section 77- Part 78a-Part 78b.

Unit 18.

Section 77- Part 78a-Part 78b.

Exercise 1 (for Section 77),

Exercise 1 (for Part 78a),

and Exercise 2 (for Part 78b).

473

- 1-7. a. 9 thousands, 5 hundreds, 0 tens, and 7 ones = 9,507.  
b. 6 thousands, 4 hundreds, 3 tens, and 0 ones = 6,430.  
c. 4 ten-thousands, 0 thousands, 2 hundreds, 9 tens, 8 ones = 40,298.  
d. 5 thousands, 7 hundreds, 9 tens, 2 ones = 5,792.  
e. 4 ten-thousands, 8 thousands, 2 hundreds, 3 tens, 6 ones = 48,236.  
f. 13 thousands, 0 hundreds, 3 tens, 8 ones = 13,038.

Section 78.

- 1-1.

1									
								2	1
								4	2
							8	4	2
					16	8	4	2	1
			32	16	8	4	2	1	
	64	32	16	8	4	2	1		
128	64	32	16	8	4	2	1		
256	128	64	32	16	8	4	2	1	

- 57.

16 8 4 2 1

- 2-1. 1 1 1 1  $8 + 4 + 2 + 1 = 15$

- 2-2.  $1 \ 0 \ 1 \ 1 \quad 8 + 2 + 1 = 11$

- 2-3. 1 0 0 0 0 16

- 2-4.  $1 \ 0 \ 1 \ 1 \ 0 \quad 16 + 4 + 2 = 22$

- 2-5.  $1 \ 1 \ 1 \ 0 \ 1 \quad 16 + 8 + 4 + 1 = 29$

- 2-6.  $1 \ 1 \ 0 \ 1 \ 1 \quad 16 + 8 + 2 + 1 = 27$

- $$2-7 \quad 1 \ 0 \ 1 \ 1 \ 1 \quad 16 + 4 + 2 + 1 = 23$$

## Unit 18.

Section 78.  
Exercises 2-3.

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Exercise 2  
(continued).

	64	32	16	8	4	2	1	
2-8.		1	0	0	0	0	0	32
2-9.		1	1	0	1	1	0	$32+16+4+2=54$
2-10.		1	0	0	1	1	1	$32+4+2+1=39$
2-11.	1	1	0	1	1	0	1	$64+32+8+4+1=109$
2-12.	1	0	0	1	0	1	1	$64+8+2+1=75$
2-13.	1	0	1	1	0	1	0	$64+16+8+2=90$
2-14.	1	0	1	0	1	0	1	$64+16+4+1=85$

3-1.  $31 = 16 + 8 + 4 + 2 + 1$  (11111)

3-2.  $15 = 8 + 4 + 2 + 1$  (1111)

3-3.  $63 = 32 + 16 + 8 + 4 + 2 + 1$  (111111)

3-4.  $13 = 8 + 4 + 1$  (1101)

3-5.  $27 = 16 + 8 + 2 + 1$  (11011)

3-6.  $47 = 32 + 8 + 4 + 2 + 1$  (101111)

3-7.  $29 = 16 + 8 + 4 + 1$  (11101)

3-8.  $39 = 32 + 4 + 2 + 1$  (100111)

3-9.  $25 = 16 + 8 + 1$  (11001)

3-10.  $19 = 16 + 2 + 1$  (10011)

3-11.  $51 = 32 + 16 + 2 + 1$  (110011)

3-12.  $30 = 16 + 8 + 4 + 2$  (11110)

3-13.  $14 = 8 + 4 + 2$  (1110)

3-14.  $62 = 32 + 16 + 8 + 4 + 2$  (111110)

3-15.  $28 = 16 + 8 + 4$  (11100)

3-16.  $60 = 32 + 16 + 8 + 4$  (111100)

3-17.  $12 = 8 + 4$  (1100)

3-18.  $21 = 16 + 4 + 1$  (1101)

3-19.  $43 = 32 + 8 + 2 + 1$  (101011)

3-20.  $32 = 32$  (100000)



Sections 78-79.

Unit 18.

Part 78b - Section 79.

Exercise 4 (for Part 78b),  
and Exercise 1 (for Section 79).

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3-21.  $64 = 64$  (10000000)

3-22.  $87 = 64 + 16 + 4 + 2 + 1$  (1010111)

3-23.  $110 = 64 + 32 + 8 + 4 + 2$  (1101110)

3-24.  $117 = 64 + 32 + 16 + 4 + 1$  (1110101)

4-1. a.  $0001 - 0010 - 0000 = 120$

b.  $0011 - 0100 - 0101 = 345$

c.  $0110 - 1000 - 0111 = 687$

d.  $0100 - 0101 - 0011 = 453$

e.  $0010 - 0100 - 0111 - 0101 = 2475$

f.  $1000 - 0110 - 1001 - 0000 = 8690$

g.  $0011 - 0001 - 0010 - 0110 = 3126$

h.  $1001 - 0010 - 0001 - 0111 = 9217$

4-2. a.  $24 = 0010 - 0100$

b.  $36 = 0011 - 0110$

c.  $57 = 0101 - 0111$

d.  $142 = 0001 - 0100 - 0010$

e.  $306 = 0011 - 0000 - 0110$

f.  $258 = 0010 - 0101 - 1000$

g.  $954 = 1001 - 0101 - 0100$

h.  $587 = 0101 - 1000 - 0111$

i.  $321 = 0011 - 0010 - 0001$

j.  $6740 = 0110 - 0111 - 0100 - 0000$

k.  $3081 = 0011 - 0000 - 1000 - 0001$

l.  $2954 = 0010 - 1001 - 0101 - 0100$

Section 79.

1. a.  $1000 = 8$     b.  $1010 = 10$     c.  $1 = 1$   
 $\begin{array}{r} + 101 = +5 \\ \hline 1101 = 13 \end{array}$      $\begin{array}{r} + 101 = +5 \\ \hline 1111 = 15 \end{array}$      $\begin{array}{r} + 1 = +1 \\ \hline 10 = 2 \end{array}$

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Exercise 1-1  
(continued).

$$\begin{array}{r} \overset{1}{d.} \quad 10 = 2 \\ + 10 = +2 \\ \hline 100 = 4 \end{array}$$

$$\begin{array}{r} \overset{1}{e.} \quad 100 = 4 \\ + 100 = +4 \\ \hline 1000 = 8 \end{array}$$

$$\begin{array}{r} \overset{1}{f.} \quad 101 = 5 \\ + 1 = +1 \\ \hline 110 = 6 \end{array}$$

$$\begin{array}{r} \overset{1}{1-2.} \quad a. \quad 11 = 3 \\ + 1 = +1 \\ \hline 100 = 4 \end{array}$$

$$\begin{array}{r} \overset{1}{b.} \quad 101 = 5 \\ + 11 = +3 \\ \hline 1000 = 8 \end{array}$$

$$\begin{array}{r} \overset{1}{c.} \quad 111 = 7 \\ + 1 = +1 \\ \hline 1000 = 8 \end{array}$$

$$\begin{array}{r} \overset{1}{d.} \quad 11 = 3 \\ + 11 = +3 \\ \hline 110 = 6 \end{array}$$

$$\begin{array}{r} \overset{1}{e.} \quad 111 = 7 \\ + 111 = +7 \\ \hline 1110 = 14 \end{array}$$

$$\begin{array}{r} \overset{1}{f.} \quad 1110 = 14 \\ + 1111 = +15 \\ \hline 11101 = 29 \end{array}$$

$$\begin{array}{r} \overset{1}{g.} \quad 11011 = 27 \\ + 10111 = +23 \\ \hline 110010 = 50 \end{array}$$

$$\begin{array}{r} \overset{1}{h.} \quad 10101 = 21 \\ + 11011 = +27 \\ \hline 110000 = 48 \end{array}$$

$$\begin{array}{r} \overset{1}{i.} \quad 11101 = 29 \\ + 10111 = +23 \\ \hline 110100 = 52 \end{array}$$

$$\begin{array}{r} \overset{1}{j.} \quad 1 = 1 \\ 1 = 1 \\ + 1 = +1 \\ \hline 11 = 3 \end{array}$$

$$\begin{array}{r} \overset{2}{k.} \quad 1' = 1 \\ 1 = 1 \\ 1 = 1 \\ + 1 = +1 \\ \hline 100 = 4 \end{array}$$

$$\begin{array}{r} \overset{1}{l.} \quad 10 = 2 \\ 11 = 3 \\ + 10 = +2 \\ \hline 111 = 7 \end{array}$$

$$\begin{array}{r} \overset{2}{m.} \quad 101 = 5 \\ 111 = 7 \\ 10 = 2 \\ + 100 = +4 \\ \hline 10010 = 18 \end{array}$$

$$\begin{array}{r} \overset{2}{n.} \quad 101 = 5 \\ 111 = 7 \\ + 110 = +6 \\ \hline 10010 = 18 \end{array}$$

$$\begin{array}{r} \overset{1}{o.} \quad 1011 = 11 \\ 1101 = 13 \\ 1011 = 11 \\ + 1001 = +9 \\ \hline 101100 = 44 \end{array}$$



Section 79.  
Exercise 2.

Unit 18.

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2-1. a.  $111 = 7$  b.  $101 = 5$  c.  $101 = 5$   
 $\begin{array}{r} \times 10 \\ \hline 1110 \end{array} = \begin{array}{r} \times 2 \\ \hline 14 \end{array}$   $\begin{array}{r} \times 100 \\ \hline 10100 \end{array} = \begin{array}{r} \times 4 \\ \hline 20 \end{array}$   $\begin{array}{r} \times 11 \\ \hline 101 \end{array} = \begin{array}{r} \times 3 \\ \hline 5 \end{array}$   
 $\begin{array}{r} 101 \\ + 10 \\ \hline 1111 \end{array} = \begin{array}{r} 15 \end{array}$

d.  $11 = 3$  e.  $111 = 7$  f.  $1101 = 13$   
 $\begin{array}{r} \times 11 \\ \hline 11 \end{array} = \begin{array}{r} \times 3 \\ \hline 3 \end{array}$   $\begin{array}{r} \times 101 \\ \hline 111 \end{array} = \begin{array}{r} \times 5 \\ \hline 7 \end{array}$   $\begin{array}{r} \times 11 \\ \hline 1101 \end{array} = \begin{array}{r} \times 3 \\ \hline 13 \end{array}$   
 $\begin{array}{r} 11 \\ + 6 \\ \hline 1001 \end{array} = \begin{array}{r} 9 \end{array}$   $\begin{array}{r} 111 \\ + 28 \\ \hline 100011 \end{array} = \begin{array}{r} 35 \end{array}$   $\begin{array}{r} 1101 \\ + 26 \\ \hline 100111 \end{array} = \begin{array}{r} 39 \end{array}$

2-2. a.  $111 = 7$  b.  $1111 = 15$  c.  $1101 = 13$   
 $\begin{array}{r} \times 11 \\ \hline 111 \end{array} = \begin{array}{r} \times 3 \\ \hline 7 \end{array}$   $\begin{array}{r} \times 11 \\ \hline 1111 \end{array} = \begin{array}{r} \times 3 \\ \hline 15 \end{array}$   $\begin{array}{r} \times 101 \\ \hline 1101 \end{array} = \begin{array}{r} \times 5 \\ \hline 13 \end{array}$   
 $\begin{array}{r} 111 \\ + 14 \\ \hline 10101 \end{array} = \begin{array}{r} 21 \end{array}$   $\begin{array}{r} 1111 \\ + 30 \\ \hline 101101 \end{array} = \begin{array}{r} 45 \end{array}$   $\begin{array}{r} 1101 \\ + 52 \\ \hline 1000001 \end{array} = \begin{array}{r} 65 \end{array}$

d.  $1111 = 15$  e.  $1101 = 13$  f.  $1011 = 11$   
 $\begin{array}{r} \times 101 \\ \hline 1111 \end{array} = \begin{array}{r} \times 5 \\ \hline 15 \end{array}$   $\begin{array}{r} \times 110 \\ \hline 1101 \end{array} = \begin{array}{r} \times 6 \\ \hline 26 \end{array}$   $\begin{array}{r} \times 1100 \\ \hline 1011 \end{array} = \begin{array}{r} \times 12 \\ \hline 44 \end{array}$   
 $\begin{array}{r} 1111 \\ + 60 \\ \hline 1001011 \end{array} = \begin{array}{r} 75 \end{array}$   $\begin{array}{r} 1101 \\ + 52 \\ \hline 1001110 \end{array} = \begin{array}{r} 78 \end{array}$   $\begin{array}{r} 1011 \\ + 88 \\ \hline 10000100 \end{array} = \begin{array}{r} 132 \end{array}$

g.  $111 = 7$  h.  $1011 = 11$   
 $\begin{array}{r} \times 111 \\ \hline 111 \end{array} = \begin{array}{r} \times 7 \\ \hline 7 \end{array}$   $\begin{array}{r} \times 111 \\ \hline 1011 \end{array} = \begin{array}{r} \times 7 \\ \hline 11 \end{array}$   
 $\begin{array}{r} 111 \\ + 14 \\ \hline 110001 \end{array} = \begin{array}{r} 49 \end{array}$   $\begin{array}{r} 1011 \\ + 44 \\ \hline 1001101 \end{array} = \begin{array}{r} 77 \end{array}$

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Exercise 2-2  
(continued).

$$\begin{array}{r}
 i. \quad 1011 = 11 \\
 \times 1101 = \times 13 \\
 \hline
 1111011 = 11 \\
 1011 = 44 \\
 1011 = +88 \\
 10001111 = 143
 \end{array}$$

$$\begin{array}{r}
 j. \quad 1111 = 15 \\
 \times 111 = \times 7 \\
 \hline
 1222111 = 15 \\
 1111 = 30 \\
 1111 = +60 \\
 1101001 = 105
 \end{array}$$

$$\begin{array}{r}
 3-1. \quad a. \quad 10 = 2 \\
 - 10 = -2 \\
 \hline
 0 = 0
 \end{array}
 \quad
 \begin{array}{r}
 b. \quad 11 = 3 \\
 - 10 = -2 \\
 \hline
 1 = 1
 \end{array}
 \quad
 \begin{array}{r}
 c. \quad 110 = 6 \\
 - 10 = -2 \\
 \hline
 100 = 4
 \end{array}$$

$$\begin{array}{r}
 d. \quad 101 = 5 \\
 - 1 = -1 \\
 \hline
 100 = 4
 \end{array}
 \quad
 \begin{array}{r}
 e. \quad 111 = 7 \\
 - 101 = -5 \\
 \hline
 10 = 2
 \end{array}
 \quad
 \begin{array}{r}
 f. \quad 1111 = 15 \\
 - 11 = -3 \\
 \hline
 1100 = 12
 \end{array}$$

$$\begin{array}{r}
 32. \quad a. \quad \overset{010}{10} = 2 \\
 - 1 = -1 \\
 \hline
 1 = 1
 \end{array}
 \quad
 \begin{array}{r}
 b. \quad \overset{010}{110} = 6 \\
 - 1 = -1 \\
 \hline
 101 = 5
 \end{array}
 \quad
 \begin{array}{r}
 c. \quad \overset{010}{100} = 4 \\
 - 10 = -2 \\
 \hline
 10 = 2
 \end{array}$$

$$\begin{array}{r}
 d. \quad \overset{010}{101} = 5 \\
 - 10 = -2 \\
 \hline
 11 = 3
 \end{array}
 \quad
 \begin{array}{r}
 e. \quad \overset{010}{101} = 5 \\
 - 11 = -3 \\
 \hline
 10 = 2
 \end{array}
 \quad
 \begin{array}{r}
 f. \quad \overset{010}{1010} = 10 \\
 - 100 = -4 \\
 \hline
 110 = 6
 \end{array}$$

$$\begin{array}{r}
 g. \quad \overset{0110}{100} = 4 \\
 - 1 = -1 \\
 \hline
 11 = 3
 \end{array}
 \quad
 \begin{array}{r}
 h. \quad \overset{0110}{1000} = 8 \\
 - 1 = -1 \\
 \hline
 111 = 7
 \end{array}
 \quad
 \begin{array}{r}
 i. \quad \overset{0110}{100001} = 33 \\
 - 10 = -2 \\
 \hline
 11111 = 31
 \end{array}$$

$$\begin{array}{r}
 j. \quad \overset{0110}{1000} = 8 \\
 - 101 = -5 \\
 \hline
 111 = 3
 \end{array}
 \quad
 \begin{array}{r}
 k. \quad \overset{0110}{100} = 4 \\
 - 11 = -3 \\
 \hline
 11 = 1
 \end{array}
 \quad
 \begin{array}{r}
 l. \quad \overset{0110}{1100} = 6 \\
 - 11 = -3 \\
 \hline
 11 = 3
 \end{array}$$



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$$\begin{array}{r} m_1 \overset{010}{1101} = 13 \\ -1011 = -11 \\ \hline 110 = 2 \end{array}$$

$$\begin{array}{r} m_1 \overset{0101010}{110000} = 16 \\ -11 = -3 \\ \hline 1101 = 13 \end{array}$$

$$\begin{array}{r} o. \overset{010}{11101} = 29 \\ -1011 = -11 \\ \hline 10010 = 18 \end{array}$$

$$\begin{array}{l} 2-1. \quad 111 = 4+2+1=7 \\ 10 \overline{)1110} = 2 \overline{)14} \\ \underline{10} = 8 \\ \underline{11} = 6 \\ \underline{10} = 4 \\ \underline{10} = 2 \\ \underline{10} = 2 \end{array} \quad \begin{array}{l} 4-2. \quad 110 = 4+2=6 \\ 100 \overline{)11000} = 4 \overline{)24} \\ \underline{100} = 16 \\ \underline{1000} = 8 \\ \underline{1000} = 8 \end{array} \quad \begin{array}{l} 4-3. \quad 11 = 2+1=3 \\ 101 \overline{)1111} = 5 \overline{)15} \\ \underline{101} = 10 \\ \underline{101} = 5 \\ \underline{101} = 5 \end{array}$$

$$\begin{array}{l} 4-4. \quad 1001 = 8+1=9 \\ 11 \overline{)11011} = 3 \overline{)27} \\ \underline{1100} = 24 \\ \underline{11} = 3 \\ \underline{11} = 3 \end{array} \quad \begin{array}{l} 4-5. \quad 111 = 4+2+1=7 \\ 11 \overline{)10101} = 3 \overline{)27} \\ \underline{11} = 12 \\ \underline{1001} = 9 \\ \underline{11} = 6 \\ \underline{11} = 3 \\ \underline{11} = 3 \end{array} \quad \begin{array}{l} 4-6. \quad 1011 = 8+2+1=11 \\ 11 \overline{)100001} = 3 \overline{)33} \\ \underline{11} = 24 \\ \underline{1001} = 9 \\ \underline{11} = 6 \\ \underline{11} = 3 \\ \underline{11} = 3 \end{array}$$

$$\begin{array}{l} 4-7. \quad 1111 = 4+2+1=7 \\ 111 \overline{)110001} = 7 \overline{)49} \\ \underline{111} = 28 \\ \underline{10101} = 21 \\ \underline{111} = 14 \\ \underline{111} = 7 \\ \underline{111} = 7 \end{array} \quad \begin{array}{l} 4-8. \quad 101 = 4+1=5 \\ 1011 \overline{)110111} = 11 \overline{)55} \\ \underline{1011} = 44 \\ \underline{1011} = 11 \\ \underline{1011} = 11 \end{array}$$

## Unit 18.

Sections 79-80.

Exercise 4 (for Section 79),  
and Exercises 1-3 (for Section 80).

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Exercise 4  
(continued).

$$\begin{array}{r}
 4-9. \quad 1001 \div 110 = 8 \text{ R } 1 \\
 \begin{array}{r}
 110 \overline{) 110110} = 6 \text{ R } 54 \\
 \underline{110} \phantom{00} = 48 \\
 110 \phantom{00} = 6 \\
 \underline{110} \phantom{00} = 6
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 4-10. \quad 1000 \div 110 = 8 \text{ R } 8 \\
 \begin{array}{r}
 110 \overline{) 110000} = 6 \text{ R } 48 \\
 \underline{110000} = 48
 \end{array}
 \end{array}$$

## Section 80.

Section 80.

1-1. 1 out of 2.

1-2. a. 1 out of 3. b. 2 out of 3.

1-3. a. 3 out of 9. b. 6 out of 9. c. 0 out of 9.

1-4. a. 1 out of 30. b. 2 out of 30. c. 3 out of 30.

1-5. a. 4 out of 17. b. 6 out of 17. c. 7 out of 17.  
d. 0 out of 17. e. 10 out of 17.1-6. a. 200 out of 350. b. 100 out of 350.  
c. 50 out of 350. d. 150 out of 350.2-1.  $\frac{1}{5}$  of 3,500 = 700.2-2. a. 1 out of every 3 chances.  
b.  $\frac{1}{3}$  of 3,450 = 1,150.

2-3. 6 different ways.

2-4. a. 0 out of 6. b. 6 out of 6. c. 1 out of 6.  
d. 2 out of 6. e. 3 out of 6. f. 5 out of 6.2-5. 1,500 times out of a possible 4,500;  
3,500 times out of a possible 4,500.3-1.  $600 \div 200 = 3$ ;  $3 \times 3 = 9$ .3-2.  $288 \div 360 = 0.8$ ; a. 1 out of 2. b. 24 out of 30.3-3. a.  $82,000 \div 100,000 = .82$ . b.  $18,000 \div 100,000 = .18$ .3-4.  $90,000 \div 94,000 = .96$ ;  $82,000 \div 94,000 = .87$ ;  
 $65,000 \div 94,000 = .69$ ;  $39,000 \div 94,000 = .41$ .3-5. a.  $65,000 \div 97,000 = .67$ . b.  $.67 \times 400 = 268$ .



Appendix A.

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1. a.  $\$650.00 \times 6\%$  ( $\$39.00$ ) for 6 days =  $\$.65$ .  
b.  $\$480.00 \times 6\%$  ( $\$28.80$ ) for 60 days =  $\$4.80$ .  
c.  $\$1,300.00 \times 6\%$  ( $\$78.00$ ) for 6 days =  $\$1.30$ .  
d.  $\$350.00 \times 6\%$  ( $\$21.00$ ) for 600 days =  $\$35.00$ .  
e.  $\$25.00 \times 6\%$  ( $\$15.00$ ) for 6 days =  $\$.03$ .  
2. a.  $\$190.00 \times 6\%$  ( $\$11.40$ ) for 2 months =  $\$1.90$ .  
b.  $\$182.00 \times 6\%$  ( $\$10.92$ ) for 6,000 days =  $\$182.00$ .  
c.  $\$435.00 \times 6\%$  ( $\$26.10$ ) for 60 days =  $\$4.35$ .  
d.  $\$156.00 \times 6\%$  ( $\$9.36$ ) for 2 months =  $\$1.56$ .  
e.  $\$1,116.00 \times 6\%$  ( $\$66.96$ ) for 60 days =  $\$11.16$ .  
3. a.  $\$740.00 \times 6\%$  ( $\$44.40$ ) for 6 days =  $\$.74$ .  
b.  $\$523.00 \times 6\%$  ( $\$31.38$ ) for 600 days =  $\$52.30$ .  
c.  $\$280.00 \times 6\%$  ( $\$16.80$ ) for 60 days =  $\$2.80$ .  
d.  $\$995.00 \times 6\%$  ( $\$59.70$ ) for 6,000 days =  $\$995.00$ .  
e.  $\$2,100.00 \times 6\%$  ( $\$126.00$ ) for 600 days =  $\$210.00$ .

- 2-1. a.  $\$250.00 \times 6\%$  ( $\$15.00$ ) for 12 days =  $\$.50$ .  
b.  $\$400.00 \times 6\%$  ( $\$24.00$ ) for 18 days =  $\$1.20$ .  
c.  $\$800.00 \times 6\%$  ( $\$48.00$ ) for 24 days =  $\$3.20$ .  
d.  $\$350.00 \times 6\%$  ( $\$21.00$ ) for 120 days =  $\$7.00$ .  
e.  $\$130.00 \times 6\%$  ( $\$7.80$ ) for 180 days =  $\$3.90$ .  
f.  $\$120.00 \times 6\%$  ( $\$7.20$ ) for 36 days =  $\$.72$ .  
g.  $\$500.00 \times 6\%$  ( $\$30.00$ ) for 48 days =  $\$4.00$ .  
h.  $\$110.00 \times 6\%$  ( $\$6.60$ ) for 240 days =  $\$4.40$ .  
2-2. a.  $\$90.00 \times 6\%$  ( $\$5.40$ ) for 42 days =  $\$.63$ .  
b.  $\$80.00 \times 6\%$  ( $\$4.80$ ) for 360 days =  $\$4.80$ .  
c.  $\$450.00 \times 6\%$  ( $\$27.00$ ) for 1,200 days =  $\$90.00$ .  
d.  $\$110.00 \times 6\%$  ( $\$6.60$ ) for 1,800 days =  $\$33.00$ .  
e.  $\$200.00 \times 6\%$  ( $\$12.00$ ) for 54 days =  $\$1.80$ .  
f.  $\$400.00 \times 6\%$  ( $\$24.00$ ) for 96 days =  $\$6.40$ .  
g.  $\$300.00 \times 6\%$  ( $\$18.00$ ) for 480 days =  $\$27.00$ .  
h.  $\$500.00 \times 6\%$  ( $\$30.00$ ) for 420 days =  $\$35.00$ .



Appendixes, Appendix A.  
Exercise 3.

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- 3-1.  $\$1,200.00 \times 6\% (\$72.00)$  for 1 day = \$.20.  
3-2.  $\$900.00 \times 6\% (\$54.00)$  for 2 days = \$.30.  
3-3.  $\$840.00 \times 6\% (\$50.40)$  for 3 days = \$.42.  
3-4.  $\$1,800.00 \times 6\% (\$108.00)$  for 4 days = \$.120.  
3-5.  $\$2,400.00 \times 6\% (\$144.00)$  for 5 days = \$.200.  
3-6.  $\$240.00 \times 6\% (\$14.40)$  for 10 days = \$.140.  
3-7.  $\$350.00 \times 6\% (\$21.00)$  for 12 days = \$.70.  
3-8.  $\$280.00 \times 6\% (\$16.80)$  for 15 days = \$.70.  
3-9.  $\$270.00 \times 6\% (\$16.20)$  for 20 days = \$.90.  
3-10.  $\$320.00 \times 6\% (\$19.20)$  for 30 days = \$.60.  
3-11.  $\$210.00 \times 6\% (\$12.60)$  for 40 days = \$.140.  
3-12.  $\$240.00 \times 6\% (\$14.40)$  for 24 days = \$.96.  
3-13.  $\$160.00 \times 6\% (\$9.60)$  for 45 days = \$.20.  
3-14.  $\$360.00 \times 6\% (\$21.60)$  for 50 days = \$.30.  
3-15.  $\$72.00 \times 6\% (\$4.32)$  for 100 days = \$.120.  
3-16.  $\$55.00 \times 6\% (\$3.30)$  for 120 days = \$.110.  
3-17.  $\$80.00 \times 6\% (\$4.80)$  for 150 days = \$.200.  
3-18.  $\$120.00 \times 6\% (\$7.20)$  for 200 days = \$.400.  
3-19.  $\$140.00 \times 6\% (\$8.40)$  for 300 days = \$.700.  
3-20.  $\$110.00 \times 6\% (\$6.60)$  for 36 days = \$.166.  
3-21.  $\$300.00 \times 6\% (\$18.00)$  for 480 days = \$.2400.  
3-22.  $\$200.00 \times 6\% (\$12.00)$  for 48 days = \$.160.  
3-23.  $\$380.00 \times 6\% (\$22.80)$  for 3 days = \$.19.  
3-24.  $\$930.00 \times 6\% (\$55.80)$  for 20 days = \$.310.  
3-25.  $\$650.00 \times 6\% (\$39.00)$  for 30 days = \$.325.  
3-26.  $\$400.00 \times 6\% (\$24.00)$  for 45 days = \$.300.  
3-27.  $\$200.00 \times 6\% (\$12.00)$  for 15 days = \$.50.  
3-28.  $\$800.00 \times 6\% (\$48.00)$  for 300 days = \$.4000.



Appendix A.  
Exercises 4-5.

Appendices.

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- 4-1.  $\$180.00 \times 6\%$  (\$10.80) for 70 days = \$2.10.  
4-2.  $\$540.00 \times 6\%$  (\$32.40) for 80 days = \$7.20.  
4-3.  $\$420.00 \times 6\%$  (\$25.20) for 90 days = \$6.30.  
4-4.  $\$660.00 \times 6\%$  (\$39.60) for 35 days = \$3.85.  
4-5.  $\$1,320.00 \times 6\%$  (\$79.20) for 11 days = \$2.42.  
4-6.  $\$390.00 \times 6\%$  (\$23.40) for 64 days = \$4.16.  
4-7.  $\$227.00 \times 6\%$  (\$13.62) for 43 days = \$1.63.  
4-8.  $\$115.00 \times 6\%$  (\$6.90) for 29 days = \$.56.  
4-9.  $\$430.00 \times 6\%$  (\$25.80) for 70 days = \$5.02.  
4-10.  $\$725.00 \times 6\%$  (\$43.50) for 80 days = \$9.67.  
4-11.  $\$334.00 \times 6\%$  (\$20.04) for 22 days = \$1.22.  
4-12.  $\$800.00 \times 6\%$  (\$48.00) for 38 days = \$5.07.  
4-13.  $\$400.00 \times 6\%$  (\$24.00) for 76 days = \$5.07.  
4-14.  $\$800.00 \times 6\%$  (\$48.00) for 52 days = \$6.93.  
4-15.  $\$606.00 \times 6\%$  (\$36.36) for 17 days = \$1.72.  
4-16.  $\$752.00 \times 6\%$  (\$45.12) for 82 days = \$1.03.

- 5-1.  $\$180.00 \times 6\%$  (\$10.80) for 7 days = \$.21.  
5-2.  $\$150.00 \times 6\%$  (\$9.00) for 8 days = \$.20.  
5-3.  $\$260.00 \times 6\%$  (\$15.60) for 9 days = \$.39.  
5-4.  $\$300.00 \times 6\%$  (\$18.00) for 7 days = \$.35.  
5-5.  $\$300.00 \times 6\%$  (\$18.00) for 8 days = \$.40.  
5-6.  $\$660.00 \times 6\%$  (\$39.60) for 7 days = \$.77.  
5-7.  $\$8,000.00 \times 6\%$  (\$480.00) for 9 days = \$12.00.  
5-8.  $\$900.00 \times 6\%$  (\$54.00) for 8 days = \$1.20.  
5-9.  $\$420.00 \times 6\%$  (\$25.20) for 7 days = \$.49.  
5-10.  $\$2,400.00 \times 6\%$  (\$144.00) for 9 days = \$3.60.  
5-11.  $\$2,700.00 \times 6\%$  (\$162.00) for 8 days = \$3.60.  
5-12.  $\$2,400.00 \times 6\%$  (\$144.00) for 7 days = \$2.80.

Appendix A.  
Exercises 6-7.

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- 6-1.  $\$440.00 \times 6\%$  ( $\$26.40$ ) for 67 days =  $\$4.91$ .  
6-2.  $\$650.00 \times 6\%$  ( $\$39.00$ ) for 68 days =  $\$7.37$ .  
6-3.  $\$734.00 \times 6\%$  ( $\$44.04$ ) for 69 days =  $\$8.44$ .  
6-4.  $\$395.00 \times 6\%$  ( $\$23.70$ ) for 68 days =  $\$4.48$ .  
6-5.  $\$844.00 \times 6\%$  ( $\$50.64$ ) for 7 days =  $\$1.98$ .  
6-6.  $\$925.00 \times 6\%$  ( $\$55.50$ ) for 8 days =  $\$1.23$ .  
6-7.  $\$769.00 \times 6\%$  ( $\$46.14$ ) for 9 days =  $\$1.15$ .  
6-8.  $\$685.00 \times 6\%$  ( $\$41.10$ ) for 7 days =  $\$.80$ .  
6-9.  $\$722.00 \times 6\%$  ( $\$43.32$ ) for 12 days =  $\$1.45$ .  
6-10.  $\$898.00 \times 6\%$  ( $\$53.88$ ) for 13 days =  $\$1.95$ .  
6-11.  $\$519.00 \times 6\%$  ( $\$31.14$ ) for 14 days =  $\$1.21$ .  
6-12.  $\$608.00 \times 6\%$  ( $\$36.48$ ) for 13 days =  $\$1.32$ .  
6-13.  $\$326.00 \times 6\%$  ( $\$19.56$ ) for 8 days =  $\$.43$ .  
6-14.  $\$715.00 \times 6\%$  ( $\$42.90$ ) for 69 days =  $\$8.22$ .  
6-15.  $\$812.00 \times 6\%$  ( $\$48.72$ ) for 14 days =  $\$1.89$ .  
6-16.  $\$377.00 \times 6\%$  ( $\$22.62$ ) for 12 days =  $\$.75$ .

- 7-1.  $\$350.00 \times 6\%$  ( $\$21.00$ ) for 66 days =  $\$3.85$ .  
7-2.  $\$420.00 \times 6\%$  ( $\$25.20$ ) for 70 days =  $\$4.90$ .  
7-3.  $\$150.00 \times 6\%$  ( $\$9.00$ ) for 72 days =  $\$1.80$ .  
7-4.  $\$320.00 \times 6\%$  ( $\$19.20$ ) for 75 days =  $\$4.00$ .  
7-5.  $\$210.00 \times 6\%$  ( $\$12.60$ ) for 80 days =  $\$2.80$ .  
7-6.  $\$160.00 \times 6\%$  ( $\$9.60$ ) for 90 days =  $\$2.40$ .  
7-7.  $\$250.00 \times 6\%$  ( $\$15.00$ ) for 72 days =  $\$3.00$ .  
7-8.  $\$360.00 \times 6\%$  ( $\$21.60$ ) for 80 days =  $\$4.80$ .  
7-9.  $\$84.00 \times 6\%$  ( $\$5.04$ ) for 70 days =  $\$.98$ .  
7-10.  $\$180.00 \times 6\%$  ( $\$10.80$ ) for 90 days =  $\$2.70$ .  
7-11.  $\$160.00 \times 6\%$  ( $\$9.60$ ) for 75 days =  $\$2.00$ .  
7-12.  $\$480.00 \times 6\%$  ( $\$28.80$ ) for 90 days =  $\$7.20$ .



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- 7-13.  $\$520.00 \times 6\% (\$31.20)$  for 66 days =  $\$5.72$ .  
 7-14.  $\$240.00 \times 6\% (\$14.40)$  for 80 days =  $\$3.20$ .  
 7-15.  $\$300.00 \times 6\% (\$18.00)$  for 70 days =  $\$3.50$ .  
 7-16.  $\$800.00 \times 6\% (\$48.00)$  for 75 days =  $\$10.00$ .  
 7-17.  $\$900.00 \times 6\% (\$54.00)$  for 66 days =  $\$9.90$ .  
 7-18.  $\$220.00 \times 6\% (\$13.20)$  for 72 days =  $\$2.64$ .

- 8-1.  $\$1,265.00 \times 6\% (\$75.90)$  for 66 days =  $\$1.39$ .  
 8-2.  $\$1,723.00 \times 6\% (\$103.38)$  for 70 days =  $\$20.10$ .  
 8-3.  $\$895.00 \times 6\% (\$53.70)$  for 75 days =  $\$11.19$ .  
 8-4.  $\$1,645.00 \times 6\% (\$98.70)$  for 80 days =  $\$21.93$ .  
 8-5.  $\$1,584.00 \times 6\% (\$95.04)$  for 90 days =  $\$23.76$ .  
 8-6.  $\$775.00 \times 6\% (\$46.50)$  for 70 days =  $\$9.04$ .  
 8-7.  $\$2,540.00 \times 6\% (\$152.40)$  for 90 days =  $\$38.10$ .  
 8-8.  $\$4,145.00 \times 6\% (\$248.70)$  for 75 days =  $\$51.81$ .  
 8-9.  $\$3,123.00 \times 6\% (\$187.38)$  for 70 days =  $\$36.44$ .  
 8-10.  $\$1,179.00 \times 6\% (\$70.74)$  for 66 days =  $\$12.97$ .  
 8-11.  $\$2,118.00 \times 6\% (\$127.08)$  for 90 days =  $\$31.77$ .  
 8-12.  $\$4,815.00 \times 6\% (\$288.90)$  for 75 days =  $\$60.19$ .  
 8-13.  $\$1,897.00 \times 6\% (\$113.82)$  for 680 days =  $\$214.99$ .  
 8-14.  $\$3,396.00 \times 6\% (\$203.76)$  for 672 days =  $\$380.35$ .  
 8-15.  $\$575.00 \times 6\% (\$34.50)$  for 690 days =  $\$66.12$ .  
 8-16.  $\$616.00 \times 6\% (\$36.96)$  for 675 days =  $\$69.30$ .

- 9-1.  $\$600.00 \times 6\% (\$36.00)$  for 87 days =  $\$8.70$ .  
 9-2.  $\$60.00 \times 6\% (\$3.60)$  for 125 days =  $\$1.25$ .  
 9-3.  $\$6,000.00 \times 6\% (\$360.00)$  for 35 days =  $\$35.00$ .  
 9-4.  $\$600.00 \times 6\% (\$36.00)$  for 46 days =  $\$4.60$ .  
 9-5.  $\$6,000.00 \times 6\% (\$360.00)$  for 45 days =  $\$45.00$ .  
 9-6.  $\$240.00 \times 6\% (\$14.40)$  for 61 days =  $\$2.44$ .



Appendixes Appendix A.  
Exercises 9-10.

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Exercise 9  
(continued).

- 9-7.  $\$1,800.00 \times 6\% (\$108.00)$  for 22 days =  $\$6.60$ .  
9-8.  $\$12,000.00 \times 6\% (\$720.00)$  for 19 days =  $\$38.00$ .  
9-9.  $\$30.00 \times 6\% (\$1.80)$  for 140 days =  $\$.70$ .  
9-10.  $\$90.00 \times 6\% (\$5.40)$  for 220 days =  $\$3.30$ .  
9-11.  $\$360.00 \times 6\% (\$21.60)$  for 130 days =  $\$7.80$ .  
9-12.  $\$420.00 \times 6\% (\$25.20)$  for 80 days =  $\$5.60$ .  
9-13.  $\$300.00 \times 6\% (\$18.00)$  for 44 days =  $\$2.20$ .  
9-14.  $\$900.00 \times 6\% (\$54.00)$  for 26 days =  $\$3.90$ .  
9-15.  $\$3,000.00 \times 6\% (\$180.00)$  for 82 days =  $\$41.00$ .  
9-16.  $\$200.00 \times 6\% (\$12.00)$  for 69 days =  $\$2.30$ .  
9-17.  $\$15.00 \times 6\% (\$.90)$  for 208 days =  $\$.52$ .  
9-18.  $\$180.00 \times 6\% (\$10.80)$  for 23 days =  $\$.60$ .  
9-19.  $\$150.00 \times 6\% (\$9.00)$  for 28 days =  $\$.70$ .  
9-20.  $\$24.00 \times 6\% (\$1.44)$  for 50 days =  $\$.20$ .  
9-21.  $\$450.00 \times 6\% (\$27.00)$  for 280 days =  $\$21.00$ .  
9-22.  $\$45.00 \times 6\% (\$2.70)$  for 32 days =  $\$.24$ .  
9-23.  $\$3,600.00 \times 6\% (\$216.00)$  for 35 days =  $\$21.60$ .  
9-24.  $\$1,200.00 \times 6\% (\$72.00)$  for 105 days =  $\$21.00$ .
- 10-1.  $\$800.00 \times 6\% (\$48.00)$  for 142 days =  $\$18.96$ .  
10-2.  $\$900.00 \times 6\% (\$54.00)$  for 133 days =  $\$19.95$ .  
10-3.  $\$700.00 \times 6\% (\$42.00)$  for 115 days =  $\$13.42$ .  
10-4.  $\$80.00 \times 6\% (\$4.80)$  for 127 days =  $\$1.69$ .  
10-5.  $\$90.00 \times 6\% (\$5.40)$  for 153 days =  $\$2.30$ .  
10-6.  $\$70.00 \times 6\% (\$4.20)$  for 136 days =  $\$1.59$ .  
10-7.  $\$30.00 \times 6\% (\$1.80)$  for 162 days =  $\$.81$ .  
10-8.  $\$15.00 \times 6\% (\$.90)$  for 155 days =  $\$.39$ .  
10-9.  $\$1,200.00 \times 6\% (\$72.00)$  for 110 days =  $\$22.00$ .  
10-10.  $\$6,000.00 \times 6\% (\$360.00)$  for 89 days =  $\$89.00$ .  
10-11.  $\$3,600.00 \times 6\% (\$216.00)$  for 43 days =  $\$25.80$ .  
10-12.  $\$12,000.00 \times 6\% (\$720.00)$  for 77 days =  $\$154.00$ .



- 10-13.  $\$1,800.00 \times 6\%$  ( $\$108.00$ ) for 139 days =  $\$41.70$ .  
 10-14.  $\$2,400.00 \times 6\%$  ( $\$144.00$ ) for 97 days =  $\$38.80$ .  
 10-15.  $\$120.00 \times 6\%$  ( $\$7.20$ ) for 145 days =  $\$2.90$ .  
 10-16.  $\$180.00 \times 6\%$  ( $\$10.80$ ) for 129 days =  $\$3.87$ .  
 10-17.  $\$240.00 \times 6\%$  ( $\$14.40$ ) for 107 days =  $\$4.28$ .  
 10-18.  $\$3,000.00 \times 6\%$  ( $\$180.00$ ) for 81 days =  $\$40.50$ .  
 10-19.  $\$12.00 \times 6\%$  ( $\$.72$ ) for 176 days =  $\$.35$ .  
 10-20.  $\$450.00 \times 6\%$  ( $\$27.00$ ) for 237 days =  $\$17.78$ .  
 10-21.  $\$150.00 \times 6\%$  ( $\$9.00$ ) for 87 days =  $\$2.18$ .  
 10-22.  $\$300.00 \times 6\%$  ( $\$18.00$ ) for 142 days =  $\$7.10$ .  
 10-23.  $\$360.00 \times 6\%$  ( $\$21.60$ ) for 178 days =  $\$10.68$ .  
 10-24.  $\$9,000.00 \times 6\%$  ( $\$540.00$ ) for 57 days =  $\$85.50$ .

- 1-1.  $\$360.00 \times 6\%$  ( $\$21.60$ ) for 2 months =  $\$3.60$ .  
 1-2.  $\$270.00 \times 6\%$  ( $\$16.20$ ) for 1 month =  $\$1.35$ .  
 1-3.  $\$200.00 \times 6\%$  ( $\$12.00$ ) for 3 months =  $\$3.00$ .  
 1-4.  $\$150.00 \times 6\%$  ( $\$9.00$ ) for 4 months =  $\$3.00$ .  
 1-5.  $\$200.00 \times 6\%$  ( $\$12.00$ ) for 5 months =  $\$5.00$ .  
 1-6.  $\$120.00 \times 6\%$  ( $\$7.20$ ) for 8 months =  $\$4.80$ .  
 1-7.  $\$80.00 \times 6\%$  ( $\$4.80$ ) for 7 months =  $\$2.80$ .  
 1-8.  $\$70.00 \times 6\%$  ( $\$4.20$ ) for 5 months =  $\$1.75$ .  
 1-9.  $\$130.00 \times 6\%$  ( $\$7.80$ ) for 1 month =  $\$.65$ .

- 2-1.  $\$672.00 \times 3\%$  ( $\$20.16$ ) for 40 days =  $\$2.24$ .  
 2-2.  $\$726.00 \times 2\%$  ( $\$14.52$ ) for 45 days =  $\$1.81$ .  
 2-3.  $\$696.00 \times 1\frac{1}{2}\%$  ( $\$10.44$ ) for 70 days =  $\$2.03$ .  
 2-4.  $\$748.00 \times 1\%$  ( $\$7.48$ ) for 80 days =  $\$1.66$ .  
 2-5.  $\$425.00 \times 7\%$  ( $\$29.75$ ) for 22 days =  $\$1.82$ .  
 2-6.  $\$380.00 \times 5\%$  ( $\$19.00$ ) for 36 days =  $\$1.90$ .  
 2-7.  $\$573.00 \times 7\frac{1}{2}\%$  ( $\$42.98$ ) for 15 days =  $\$1.79$ .  
 2-8.  $\$663.00 \times 8\%$  ( $\$53.04$ ) for 80 days =  $\$11.79$ .  
 2-9.  $\$125.00 \times 2\%$  ( $\$2.50$ ) for 90 days =  $\$.62$ .



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Exercise 12  
(continued).

- 12-10.  $\$630.00 \times 4\frac{1}{2}\%$  ( $\$28.35$ ) for 75 days =  $\$5.91$ .  
 12-11.  $\$546.00 \times 8\%$  ( $\$43.68$ ) for 50 days =  $\$6.07$ .  
 12-12.  $\$872.00 \times 5\%$  ( $\$43.60$ ) for 25 days =  $\$3.03$ .  
 12-13.  $\$765.00 \times 4\%$  ( $\$30.60$ ) for 70 days =  $\$5.95$ .  
 12-14.  $\$864.00 \times 2\frac{1}{2}\%$  ( $\$21.60$ ) for 20 days =  $\$1.20$ .  
 12-15.  $\$488.00 \times 3\frac{1}{2}\%$  ( $\$17.08$ ) for 30 days =  $\$1.42$ .  
 12-16.  $\$400.00 \times 4\frac{1}{4}\%$  ( $\$17.00$ ) for 33 days =  $\$1.56$ .  
 12-17.  $\$325.00 \times 4\%$  ( $\$13.00$ ) for 75 days =  $\$2.71$ .  
 12-18.  $\$266.00 \times 4\frac{1}{2}\%$  ( $\$11.97$ ) for 120 days =  $\$3.99$ .

- 13-1.  $\$660.00 \times 5\%$  ( $\$33.00$ ) for 60 days =  $\$5.50$ .  
 13-2.  $\$240.00 \times 4\frac{1}{2}\%$  ( $\$10.80$ ) for 20 days =  $\$1.60$ .  
 13-3.  $\$120.00 \times 4\%$  ( $\$4.80$ ) for 15 days =  $\$1.20$ .  
 13-4.  $\$480.00 \times 1\frac{1}{2}\%$  ( $\$7.20$ ) for 60 days =  $\$1.20$ .  
 13-5.  $\$260.00 \times 3\%$  ( $\$7.80$ ) for 30 days =  $\$1.65$ .  
 13-6.  $\$400.00 \times 3\%$  ( $\$12.00$ ) for 3 months =  $\$3.00$ .  
 13-7.  $\$180.00 \times 2\%$  ( $\$3.60$ ) for 2 months =  $\$1.60$ .  
 13-8.  $\$200.00 \times 1\frac{1}{2}\%$  ( $\$3.00$ ) for 30 days =  $\$1.25$ .  
 13-9.  $\$540.00 \times 5\%$  ( $\$27.00$ ) for 2 months =  $\$4.50$ .  
 13-10.  $\$320.00 \times 2\%$  ( $\$6.40$ ) for 45 days =  $\$1.80$ .

- 14-1.  $\$750.00 \times 8\%$  ( $\$60.00$ ) for 60 days =  $\$10.00$ .  
 14-2.  $\$1,200.00 \times 9\%$  ( $\$108.00$ ) for 15 days =  $\$4.50$ .  
 14-3.  $\$5,000.00 \times 7\frac{1}{2}\%$  ( $\$375.00$ ) for 120 days =  $\$125.00$ .  
 14-4.  $\$600.00 \times 10\%$  ( $\$60.00$ ) for 60 days =  $\$10.00$ .  
 14-5.  $\$700.00 \times 6\%$  ( $\$42.00$ ) for 120 days =  $\$14.00$ .  
 14-6.  $\$1,260.00 \times 6\%$  ( $\$75.60$ ) for 15 days =  $\$3.15$ .  
 14-7.  $\$1,915.00 \times 6\%$  ( $\$114.90$ ) for 6 days =  $\$1.92$ .  
 14-8.  $\$1,250.00 \times 9\%$  ( $\$112.50$ ) for 60 days =  $\$18.75$ .  
 14-9.  $\$600.00 \times 8\%$  ( $\$48.00$ ) for 30 days =  $\$4.00$ .  
 14-10.  $\$230.00 \times 3\%$  ( $\$6.90$ ) for 60 days =  $\$1.15$ .



# Appendixes A-B.

Exercise 14 (for Appendix A),  
and Drill 1 (for Appendix B).

Appendixes

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- 14-11.  $\$300.00 \times 7\% (\$21.00)$  for 4 months =  $\$7.00$ ,  
 14-12.  $\$600.00 \times 6\% (\$36.00)$  for 19 days =  $\$1.90$ ,  
 14-13.  $\$4,000.00 \times 9\% (\$360.00)$  for 30 days =  $\$30.00$ ,  
 14-14.  $\$1,200.00 \times 6\% (\$72.00)$  for 2 months =  $\$12.00$ ,  
 14-15.  $\$2,000.00 \times 9\% (\$180.00)$  for 6 days =  $\$3.00$ ,  
 14-16.  $\$300.00 \times 8\% (\$24.00)$  for 30 days =  $\$2.00$ ,  
 14-17.  $\$400.00 \times 9\% (\$36.00)$  for 75 days =  $\$7.50$ ,  
 14-18.  $\$1,200.00 \times 10\% (\$120.00)$  for 90 days =  $\$30.00$ ,  
 14-19.  $\$600.00 \times 6\% (\$36.00)$  for 47 days =  $\$4.70$ ,  
 14-20.  $\$600.00 \times 9\% (\$54.00)$  for 84 days =  $\$12.60$ .

## Appendix B.

	a.	b.	c.	d.	e.	f.
1.	76	89	86	456	\$ .86	\$ 129.35
2.	94	76	679	5,794	.29	87.29
3.	81	21	48	76,532	.31	3.50
4.	27	48	63	967	.42	16.48
5.	43	37	99	82,658	12.95	194.76
6.	59	52	75	4,369	.87	8.95
7.	84	19	32	2,123	.64	69.83
8.	26	87	21	35,254	.72	100.00
9.	29	31	198	4,683	.27	7.26
10.	74	55	54	28,765	1.46	35.42
11.	83	83	37	5,124	.35	472.19
12.	19	49	89	71,676	.92	107.24
13.	79	23	75	3,782	.88	86.28
14.	85	53	42	52,497	.83	55.24
15.	92	18	783	870	5.47	423.42
16.	+ 67	+ 66	+ 97	+ 3,913	+ .60	+ 37.68
Totals	1,018	807	2,478	384,463	\$ 27.84	\$ 1,834.89

Appendix B.  
Drill 2.

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Drill 2. 1. a. 
$$\begin{array}{r} 8,965,395 \\ - 7,360,273 \\ \hline 1,605,122 \end{array}$$

c. 
$$\begin{array}{r} 12,806,638 \\ - 9,707,553 \\ \hline 3,099,085 \end{array}$$

2. a. 
$$\begin{array}{r} 9,789,489 \\ - 5,608,029 \\ \hline 4,181,460 \end{array}$$

c. 
$$\begin{array}{r} 91,313,904 \\ - 35,296,808 \\ \hline 56,017,096 \end{array}$$

3. a. 
$$\begin{array}{r} 8,437,482 \\ - 1,105,381 \\ \hline 7,332,101 \end{array}$$

c. 
$$\begin{array}{r} 82,104,006 \\ - 64,008,009 \\ \hline 18,095,997 \end{array}$$

4. a. 
$$\begin{array}{r} 9,491,459 \\ - 2,441,251 \\ \hline 7,050,208 \end{array}$$

c. 
$$\begin{array}{r} 98,016,102 \\ - 89,067,304 \\ \hline 5,948,798 \end{array}$$

b. 
$$\begin{array}{r} \$ 57,630.00 \\ - 40,534.75 \\ \hline \$ 17,095.25 \end{array}$$

d. 
$$\begin{array}{r} \$ 877,181.58 \\ - 480,561.92 \\ \hline \$ 396,589.66 \end{array}$$

b. 
$$\begin{array}{r} \$ 76,700.00 \\ - 39,410.12 \\ \hline \$ 37,289.88 \end{array}$$

d. 
$$\begin{array}{r} \$ 120,121.17 \\ - 20,250.89 \\ \hline \$ 99,870.28 \end{array}$$

b. 
$$\begin{array}{r} \$ 374,422.08 \\ - 268,370.09 \\ \hline \$ 106,051.99 \end{array}$$

d. 
$$\begin{array}{r} \$ 108,074.27 \\ - 99,257.35 \\ \hline \$ 5,816.92 \end{array}$$

b. 
$$\begin{array}{r} \$ 200,907.00 \\ - 107,358.81 \\ \hline \$ 93,548.19 \end{array}$$

d. 
$$\begin{array}{r} \$ 121,028.19 \\ - 96,865.37 \\ \hline \$ 24,159.82 \end{array}$$



Appendix B.  
Drills 3-4.

Appendix

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<sup>23</sup> 1. 268 X 341 268 1072 804 91,388	<sup>11</sup> 2. 722 X 307 5054 2166 221,654	<sup>14</sup> 3. 623 X 504 2492 3115 313,992	<sup>2</sup> 4. 431 X 208 3448 862 89,648
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<sup>11</sup> 5. 822 X 702 1644 5754 577,044	<sup>1</sup> 6. 3,206 X 2,105 16030 3206 6412 6,748,630	<sup>1</sup> 7. 4,013 X 3,402 8026 16052 12039 13,652,226	<sup>1</sup> 8. 5,204 X 4,021 5204 10408 20816 20,925,284
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<sup>2</sup> 9. 6,051 X 5,014 24204 6051 1255 0,339,714	<sup>1</sup> 10. 7,003 X 1,008 56024 7003 7,059,024	<sup>1</sup> 11. 5,009 X 3,007 35063 15027 15,062,063	<sup>1</sup> 12. 6,008 X 4,002 12016 24032 24,044,016
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<sup>1</sup> 13. 7,102 X 6,004 28408 42612 42,640,408	<sup>1</sup> 14. 6,203 X 5,006 37218 31015 31,052,218	<sup>11</sup> 15. 4,022 X 2,009 36198 8044 8,080,198
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<sup>3</sup> 1. 74.1 X 82 1482 5928 6,076.2	<sup>1</sup> 2. 6.32 X 44 2528 2528 278.08	<sup>8</sup> 3. 4.08 X 67 2856 2448 273.36
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Appendix B.  
Drills 4-5.

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Drill 4  
(continued).

4. $\begin{array}{r} 6.42 \\ \times 25.4 \\ \hline 2568 \\ 3210 \\ 1284 \\ \hline 163068 \end{array}$	5. $\begin{array}{r} 8.07 \\ \times 4.23 \\ \hline 2421 \\ 1614 \\ \hline 3228 \\ 341361 \end{array}$	6. $\begin{array}{r} 3.61 \\ \times 5.04 \\ \hline 1444 \\ 1805 \\ \hline 18,1944 \end{array}$	7. $\begin{array}{r} 71.1 \\ \times 30.8 \\ \hline 5688 \\ 2133 \\ \hline 2189.88 \end{array}$
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8. $\begin{array}{r} 0.406 \\ \times 0.205 \\ \hline 2030 \\ 812 \\ \hline .083230 \end{array}$	9. $\begin{array}{r} 72.9 \\ \times 0.0301 \\ \hline 729 \\ 2187 \\ \hline 2.19429 \end{array}$	10. $\begin{array}{r} 81.5 \\ \times 0.0142 \\ \hline 1630 \\ 3260 \\ 815 \\ \hline 1.15730 \end{array}$	11. $\begin{array}{r} 4.63 \\ \times 0.107 \\ \hline 3241 \\ 463 \\ \hline .49541 \end{array}$
---	---	--	--

12. $\begin{array}{r} 0.347 \\ \times 0.026 \\ \hline 2082 \\ 694 \\ \hline .009022 \end{array}$	13. $\begin{array}{r} 1.202 \\ \times 0.208 \\ \hline 9616 \\ 2404 \\ \hline .250016 \end{array}$	14. $\begin{array}{r} 0.4127 \\ \times 1.001 \\ \hline 4127 \\ 4127 \\ \hline .4131127 \end{array}$	15. $\begin{array}{r} 0.3413 \\ \times 3.008 \\ \hline 27304 \\ 10239 \\ \hline 1.0266304 \end{array}$
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Drill 5

1. $\begin{array}{r} 264 \\ \times 3,800 \\ \hline 2112 \\ 792 \\ \hline 1,003,200 \end{array}$	2. $\begin{array}{r} 314 \\ \times 1,300 \\ \hline 942 \\ 314 \\ \hline 408,200 \end{array}$	3. $\begin{array}{r} 232 \\ \times 4,100 \\ \hline 232 \\ 928 \\ \hline 951,200 \end{array}$	4. $\begin{array}{r} 422 \\ \times 2,300 \\ \hline 1266 \\ 844 \\ \hline 970,600 \end{array}$
---	--	--	---

5. $\begin{array}{r} 280 \\ \times 76 \\ \hline 1680 \\ 1960 \\ \hline 21,280 \end{array}$	6. $\begin{array}{r} 510 \\ \times 3,300 \\ \hline 1530 \\ 1530 \\ \hline 1,683,000 \end{array}$	7. $\begin{array}{r} 420 \\ \times 5,300 \\ \hline 1260 \\ 2100 \\ \hline 2,226,000 \end{array}$	8. $\begin{array}{r} 94,000 \\ \times 570 \\ \hline 658000 \\ 470000 \\ \hline 53,580,000 \end{array}$
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9. <sup>1/2</sup> 24,000 X 360 144000 72000 8,640,000	10. <sup>1</sup> 52,000 X 180 416000 552000 9,360,000	11. <sup>3/4</sup> 930 X 3.75 4650 6510 2790 348750	12. <sup>2/4</sup> 1,700 X 4.06 10200 6800 6,902.00
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13. <sup>3</sup> 6.50 X 1,700 4550 650 1,105,000	14. 8.20 X 1,400 3280 820 11,480.00	15. <sup>1</sup> 12.10 X 1,600 7260 1210 19,360.00
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1. <sup>2/2</sup> \$8.50 X 45 4250 3400 \$382.50	2. <sup>1/2</sup> \$9.40 X 350 47000 2820 \$3,290.00	3. <sup>1</sup> \$6.50 X 1,300 1950 650 \$8,450.00	4. <sup>3/4</sup> \$1.90 X 1,450 1950 760 190 \$2,755.00
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5. \$ .70 X 1,750 1350 490 70 \$1,225.00	6. <sup>4</sup> \$ .45 X 180 360 45 \$81.00	7. \$ .52 X 2,100 52 104 \$1,092.00	8. <sup>1</sup> \$ .34 X 14,000 136 34 \$4,760.00
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Appendixes Appendix B.  
Drills 6-7.

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Drill 6  
(continued).

9. \$ 1.02	10. \$ 10.50	11. \$ 8,500	12. \$ 12,400
$\times 10,500$	$\times 3,040$	$\times 0.02542$	$\times 0.10205$
<u>510</u>	<u>4200</u>	<u>17000</u>	<u>162000</u>
102	3150	34000	24800
<u>\$10,710.00</u>	<u>\$31,920.00</u>	42500	12400
		17000	\$1,26542000
		\$216,070.00	

13. \$ 16,700	14. \$ 34,000	15. \$ 65,000
$\times 0.035$	$\times 0.01912$	$\times 0.00915$
<u>83500</u>	<u>68000</u>	<u>325000</u>
50100	34000	65000
<u>\$584500</u>	306000	585000
	34000	\$594,75000
	\$650,08000	

Drill 7.

1. $\begin{array}{r} 42 \\ 27 \overline{) 1134} \\ \underline{108} \\ 54 \\ \underline{54} \end{array}$	2. $\begin{array}{r} 47 \\ 32 \overline{) 1504} \\ \underline{128} \\ 224 \\ \underline{224} \end{array}$	3. $\begin{array}{r} 62 \\ 37 \overline{) 2294} \\ \underline{222} \\ 74 \\ \underline{74} \end{array}$	4. $\begin{array}{r} 47 \\ 37 \overline{) 1739} \\ \underline{148} \\ 259 \\ \underline{259} \end{array}$
5. $\begin{array}{r} 88 \\ 84 \overline{) 7392} \\ \underline{672} \\ 672 \\ \underline{672} \end{array}$	6. $\begin{array}{r} 109 \\ 58 \overline{) 6322} \\ \underline{58} \\ 522 \\ \underline{522} \end{array}$	7. $\begin{array}{r} 207 \\ 47 \overline{) 9729} \\ \underline{94} \\ 329 \\ \underline{329} \end{array}$	8. $\begin{array}{r} 302 \\ 39 \overline{) 11778} \\ \underline{117} \\ 78 \\ \underline{78} \end{array}$



9. $\begin{array}{r} 405 \\ 64 \overline{)25,920} \\ \underline{256} \phantom{00} \\ 320 \phantom{00} \\ \underline{320} \phantom{00} \\ 0 \end{array}$	10. $\begin{array}{r} 608 \\ 77 \overline{)46,816} \\ \underline{462} \phantom{00} \\ 616 \phantom{00} \\ \underline{616} \phantom{00} \\ 0 \end{array}$	11. $\begin{array}{r} 658 \\ 143 \overline{)94,094} \\ \underline{858} \phantom{00} \\ 829 \phantom{00} \\ \underline{715} \phantom{00} \\ 1144 \phantom{00} \\ \underline{1144} \phantom{00} \\ 0 \end{array}$	12. $\begin{array}{r} 88 \\ 114 \overline{)10,032} \\ \underline{912} \phantom{00} \\ 912 \phantom{00} \\ \underline{912} \phantom{00} \\ 0 \end{array}$
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13. $\begin{array}{r} 62 \\ 176 \overline{)10,912} \\ \underline{1056} \phantom{00} \\ 352 \phantom{00} \\ \underline{352} \phantom{00} \\ 0 \end{array}$	14. $\begin{array}{r} 172 \\ 128 \overline{)22,016} \\ \underline{128} \phantom{00} \\ 921 \phantom{00} \\ \underline{896} \phantom{00} \\ 256 \phantom{00} \\ \underline{256} \phantom{00} \\ 0 \end{array}$	15. $\begin{array}{r} 282 \\ 171 \overline{)48,222} \\ \underline{342} \phantom{00} \\ 1402 \phantom{00} \\ \underline{1368} \phantom{00} \\ 342 \phantom{00} \\ \underline{342} \phantom{00} \\ 0 \end{array}$
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2.2 $\begin{array}{r} 227.2 \\ 2.2 \overline{)500.00} \\ \underline{44} \phantom{00} \\ 60 \phantom{00} \\ \underline{44} \phantom{00} \\ 160 \phantom{00} \\ \underline{154} \phantom{00} \\ 60 \phantom{00} \\ \underline{44} \phantom{00} \\ 16 \phantom{00} \end{array}$	2. $\begin{array}{r} 2.3 \\ 6.3 \overline{)15.000} \\ \underline{126} \phantom{00} \\ 240 \phantom{00} \\ \underline{189} \phantom{00} \\ 510 \phantom{00} \\ \underline{500} \phantom{00} \\ 10 \phantom{00} \end{array}$	3. $\begin{array}{r} 73.7 \\ 1.15 \overline{)84.800} \\ \underline{805} \phantom{00} \\ 430 \phantom{00} \\ \underline{345} \phantom{00} \\ 850 \phantom{00} \\ \underline{805} \phantom{00} \\ 45 \phantom{00} \end{array}$
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Appendixes.

Appendix B.  
Drill 8.

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Drill 8  
(continued).

$$\begin{array}{r}
 4. \quad \underline{634.4} \\
 0.09 \overline{) 57.10,0} \\
 \underline{54} \phantom{00} \\
 31 \phantom{00} \\
 \underline{27} \phantom{00} \\
 40 \phantom{00} \\
 \underline{36} \phantom{00} \\
 40 \phantom{00} \\
 \underline{36} \phantom{00} \\
 4
 \end{array}$$

$$\begin{array}{r}
 5. \quad \underline{81.2} \\
 0.82 \overline{) 70.70,0} \\
 \underline{696} \phantom{00} \\
 110 \phantom{00} \\
 \underline{87} \phantom{00} \\
 230 \phantom{00} \\
 \underline{174} \phantom{00} \\
 56
 \end{array}$$

$$\begin{array}{r}
 6. \quad \underline{5.30} \\
 13.2 \overline{) 70.0,0} \\
 \underline{660} \phantom{00} \\
 400 \phantom{00} \\
 \underline{396} \phantom{00} \\
 40
 \end{array}$$

$$\begin{array}{r}
 7. \quad \underline{.18} \\
 5.4 \overline{) 1.020} \\
 \underline{54} \phantom{00} \\
 480 \phantom{00} \\
 \underline{440} \phantom{00}
 \end{array}$$

$$\begin{array}{r}
 8. \quad \underline{1.58} \\
 8.4 \overline{) 13.3,00} \\
 \underline{84} \phantom{00} \\
 490 \phantom{00} \\
 \underline{420} \phantom{00} \\
 700 \phantom{00} \\
 \underline{672} \phantom{00}
 \end{array}$$

$$\begin{array}{r}
 9. \quad \underline{17.83} \\
 0.37 \overline{) 6.60,00} \\
 \underline{37} \phantom{00} \\
 290 \phantom{00} \\
 \underline{259} \phantom{00} \\
 310 \phantom{00} \\
 \underline{296} \phantom{00} \\
 140 \phantom{00} \\
 \underline{111} \phantom{00} \\
 29
 \end{array}$$

$$\begin{array}{r}
 10. \quad \underline{27.72} \\
 0.079 \overline{) 2.190,00} \\
 \underline{158} \phantom{00} \\
 610 \phantom{00} \\
 \underline{553} \phantom{00} \\
 570 \phantom{00} \\
 \underline{553} \phantom{00} \\
 170 \phantom{00} \\
 \underline{158} \phantom{00} \\
 12
 \end{array}$$

$$\begin{array}{r}
 11. \quad \underline{2.946} \\
 2.6 \overline{) 7.6600} \\
 \underline{52} \phantom{00} \\
 246 \phantom{00} \\
 \underline{234} \phantom{00} \\
 120 \phantom{00} \\
 \underline{104} \phantom{00} \\
 160 \phantom{00} \\
 \underline{156} \phantom{00} \\
 4
 \end{array}$$

$$\begin{array}{r}
 12. \quad \underline{.228} \\
 3.9 \overline{) 0.8920} \\
 \underline{78} \phantom{00} \\
 112 \phantom{00} \\
 \underline{78} \phantom{00} \\
 340 \phantom{00} \\
 \underline{312} \phantom{00} \\
 28
 \end{array}$$



13.  $\frac{.350}{5.7 \overline{) 2.0,000}}$   
171  
290  
285  
50

14.  $\frac{2.814}{0.54 \overline{) 1.52,000}}$   
108  
440  
432  
80  
54  
260  
208  
52

15.  $\frac{1.124}{0.69 \overline{) 0.77600}}$   
69  
86  
69  
170  
138  
320  
276  
44

1.  $\frac{21.1}{180 \overline{) 3,815.0}}$   
360  
215  
180  
350  
180  
170

2.  $\frac{5.8}{490 \overline{) 2,855.0}}$   
2450  
4050  
3920  
130

3.  $\frac{3.2}{2,600 \overline{) 8,325.0}}$   
7800  
5250  
5200  
250

4.  $\frac{1.0}{4,400 \overline{) 4,800.0}}$   
4400  
4000

5.  $\frac{.42}{4,700 \overline{) 2,000.00}}$   
18800  
12000  
9400  
2600

6.  $\frac{.23}{3,500 \overline{) 824.50}}$   
7000  
12450  
10500  
1950

Appendices. Appendix B,  
Drills 9-10.

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Drill 9  
(continued).

$$\begin{array}{r} 7. \quad \quad \quad 1.64 \\ 280 \overline{) 460.00} \\ \underline{280} \phantom{00} \\ 1800 \phantom{00} \\ \underline{1680} \phantom{00} \\ 1200 \phantom{00} \\ \underline{1120} \phantom{00} \\ 80 \end{array}$$

$$\begin{array}{r} 8. \quad \quad \quad .03 \\ 730 \overline{) 25.90} \\ \underline{2190} \phantom{00} \\ 400 \end{array}$$

$$\begin{array}{r} 9. \quad \quad \quad .041 \\ 7,900 \overline{) 330.000} \\ \underline{31600} \phantom{00} \\ 14000 \phantom{00} \\ \underline{7900} \phantom{00} \\ 5100 \end{array}$$

$$\begin{array}{r} 10. \quad \quad \quad .014 \\ 1,500 \overline{) 21.850} \\ \underline{1500} \phantom{00} \\ 6850 \phantom{00} \\ \underline{6000} \phantom{00} \\ 850 \end{array}$$

$$\begin{array}{r} 11. \quad \quad \quad 1.088 \\ 17,000 \overline{) 17,150.000} \\ \underline{17000} \phantom{000} \\ 15000 \phantom{00} \\ \underline{13600} \phantom{00} \\ 14000 \phantom{00} \\ \underline{13600} \phantom{00} \\ 1400 \end{array}$$

$$\begin{array}{r} 12. \quad \quad \quad .029 \\ 6,700 \overline{) 200.000} \\ \underline{13400} \phantom{00} \\ 66000 \phantom{00} \\ \underline{60300} \phantom{00} \\ 5700 \end{array}$$

Drill 10.

$$1. \quad \frac{1}{2} + \frac{5}{6} + \frac{3}{4} = \frac{6}{12} + \frac{10}{12} + \frac{9}{12} = \frac{25}{12} = 1\frac{1}{12}$$

$$2. \quad 8\frac{1}{4} + 12\frac{1}{2} + 9\frac{1}{8} = 8\frac{2}{4} + 12\frac{2}{4} + 9\frac{1}{8} = 29\frac{3}{8} = 30\frac{1}{2}$$

$$3. \quad 5\frac{1}{3} + 16\frac{1}{2} + 6\frac{1}{4} = 5\frac{2}{6} + 16\frac{3}{6} + 6\frac{1}{2} = 27\frac{5}{6} = 28\frac{1}{2}$$

$$4. \quad 12\frac{1}{3} + 7\frac{1}{2} + 9\frac{1}{4} = 12\frac{4}{12} + 7\frac{6}{12} + 9\frac{3}{12} = 28\frac{13}{12}$$

$$5. \quad 4\frac{1}{4} + 7\frac{2}{3} + 8\frac{1}{6} = 4\frac{3}{12} + 7\frac{8}{12} + 8\frac{2}{12} = 19\frac{13}{12}$$

$$6. \quad 6\frac{1}{4} + 4\frac{1}{3} + 5\frac{1}{2} = 6\frac{3}{12} + 4\frac{4}{12} + 5\frac{6}{12} = 15\frac{13}{12}$$

$$7. \quad 12\frac{1}{2} + 5\frac{5}{6} + 12\frac{1}{3} + 20\frac{3}{4} = 12\frac{6}{12} + 5\frac{10}{12} + 12\frac{4}{12} + 20\frac{9}{12} = 49\frac{29}{12} = 51\frac{5}{12}$$

$$8. \quad 4\frac{1}{4} + 4\frac{1}{3} + 19\frac{1}{2} + 18\frac{5}{6} = 4\frac{3}{12} + 4\frac{4}{12} + 19\frac{6}{12} + 18\frac{10}{12} = 45\frac{23}{12} = 46\frac{11}{12}$$

$$9. \quad 3\frac{5}{18} + 6\frac{1}{3} + 13\frac{3}{4} + 6\frac{1}{2} = 3\frac{5}{18} + 6\frac{2}{6} + 13\frac{9}{12} + 6\frac{6}{12} = 28\frac{27}{18} = 29\frac{11}{6}$$

$$10. \quad 10\frac{1}{3} + 15\frac{5}{6} + 2\frac{1}{6} + 7\frac{1}{2} = 10\frac{2}{6} + 15\frac{5}{6} + 2\frac{1}{6} + 7\frac{3}{6} = 34\frac{9}{6} = 35\frac{1}{2}$$

$$11. \quad 10\frac{2}{3} + 11\frac{5}{6} + 4\frac{4}{9} + 12\frac{1}{2} = 10\frac{4}{6} + 11\frac{5}{6} + 4\frac{8}{18} + 12\frac{9}{18} = 37\frac{44}{18} = 39\frac{4}{9}$$

$$12. \quad 24\frac{5}{8} + 5\frac{2}{3} + 11\frac{1}{4} + 18\frac{1}{6} = 24\frac{15}{24} + 5\frac{16}{24} + 11\frac{6}{24} + 18\frac{4}{24} = 58\frac{41}{24} = 59\frac{17}{24}$$



499

$$\begin{aligned} 13. & 6\frac{7}{12} + 7\frac{3}{4} + 2\frac{1}{8} + 11\frac{5}{8} = 6\frac{14}{24} + 7\frac{18}{24} + 2\frac{3}{24} + 11\frac{20}{24} = 26\frac{55}{24} = 28\frac{7}{24} \\ 14. & 4\frac{2}{3} + 10\frac{5}{12} + 11\frac{1}{9} + 6\frac{1}{4} = 4\frac{24}{36} + 10\frac{15}{36} + 11\frac{4}{36} + 6\frac{9}{36} = 31\frac{52}{36} = 32\frac{4}{9} \\ 15. & 7\frac{5}{6} + 12\frac{1}{3} + 5\frac{4}{9} + 15\frac{1}{2} = 7\frac{15}{18} + 12\frac{6}{18} + 5\frac{8}{18} + 15\frac{9}{18} = 39\frac{38}{18} = 41\frac{1}{9} \\ 16. & 8\frac{2}{7} + 6\frac{3}{4} + 15\frac{1}{2} + 3\frac{1}{14} = 8\frac{8}{28} + 6\frac{21}{28} + 15\frac{14}{28} + 3\frac{2}{28} = 32\frac{45}{28} = 33\frac{17}{28} \\ 17. & 15\frac{3}{4} + 10\frac{1}{5} + 22\frac{1}{2} + 3\frac{7}{10} = 15\frac{15}{20} + 10\frac{4}{20} + 22\frac{10}{20} + 3\frac{14}{20} = 50\frac{43}{20} = 52\frac{3}{20} \\ 18. & 4\frac{1}{2} + 16\frac{1}{4} + 8\frac{1}{4} + 9\frac{5}{16} = 4\frac{72}{144} + 16\frac{24}{144} + 8\frac{16}{144} + 9\frac{45}{144} = 37\frac{157}{144} = 38\frac{13}{144} \end{aligned}$$

$$\begin{aligned} 1. & 18\frac{1}{12} - 7\frac{1}{2} = 18\frac{1}{12} - 7\frac{6}{12} = 10\frac{7}{12} \\ 2. & 16\frac{9}{10} - \frac{3}{5} = 16\frac{9}{10} - \frac{6}{10} = 16\frac{3}{10} \\ 3. & 27\frac{7}{15} - 9\frac{1}{3} = 27\frac{7}{15} - 9\frac{5}{15} = 18\frac{2}{15} \\ 4. & 16\frac{1}{2} - \frac{1}{3} = 16\frac{3}{6} - \frac{2}{6} = 16\frac{1}{6} \\ 5. & 21\frac{3}{4} - 6\frac{2}{3} = 21\frac{9}{12} - 6\frac{8}{12} = 15\frac{1}{12} \\ 6. & 19\frac{5}{6} - 8\frac{3}{4} = 19\frac{10}{12} - 8\frac{9}{12} = 11\frac{1}{12} \\ 7. & 24\frac{11}{12} - \frac{5}{8} = 24\frac{22}{24} - \frac{15}{24} = 24\frac{7}{24} \\ 8. & 10\frac{7}{15} - 2\frac{3}{10} = 10\frac{14}{30} - 2\frac{9}{30} = 8\frac{5}{30} \\ 9. & 21\frac{3}{4} - \frac{4}{5} = 21\frac{15}{20} - \frac{16}{20} = 20\frac{19}{20} \\ 10. & 10\frac{3}{8} - 2\frac{2}{3} = 10\frac{9}{24} - 2\frac{16}{24} = 8\frac{17}{24} \\ 11. & 12\frac{3}{4} - \frac{7}{8} = 12\frac{6}{8} - \frac{7}{8} = 11\frac{7}{8} \\ 12. & 18\frac{1}{3} - 4\frac{1}{2} = 18\frac{2}{6} - 4\frac{3}{6} = 13\frac{5}{6} \\ 13. & 12\frac{1}{2} - 8\frac{7}{8} = 12\frac{4}{8} - 8\frac{7}{8} = 3\frac{5}{8} \\ 14. & 13\frac{1}{4} - \frac{7}{8} = 13\frac{2}{8} - \frac{7}{8} = 12\frac{3}{8} \\ 15. & 10\frac{2}{3} - 3\frac{3}{5} = 10\frac{10}{15} - 3\frac{9}{15} = 7\frac{1}{15} \\ 16. & 14\frac{1}{2} - 5\frac{5}{8} = 14\frac{4}{8} - 5\frac{5}{8} = 8\frac{7}{8} \\ 17. & 15\frac{1}{2} - 9\frac{4}{5} = 15\frac{5}{10} - 9\frac{8}{10} = 5\frac{7}{10} \\ 18. & 23\frac{2}{3} - 5\frac{3}{8} = 23\frac{16}{24} - 5\frac{9}{24} = 18\frac{7}{24} \end{aligned}$$

$$\begin{aligned} 1. & 12\frac{1}{2} \times 16\frac{1}{4} = \frac{25}{2} \times \frac{65}{4} = \frac{1,625}{8} = 203\frac{1}{8} \\ 2. & 14\frac{1}{3} \times 15\frac{1}{2} = \frac{43}{3} \times \frac{31}{2} = \frac{1,333}{6} = 222\frac{1}{6} \\ 3. & 12\frac{2}{3} \times 9\frac{1}{4} = \frac{38}{3} \times \frac{37}{4} = \frac{703}{6} = 117\frac{1}{6} \\ 4. & 16\frac{1}{2} \times 5\frac{1}{4} = \frac{33}{2} \times \frac{21}{4} = \frac{693}{8} = 86\frac{5}{8} \\ 5. & 12\frac{1}{3} \times 8\frac{1}{2} = \frac{37}{3} \times \frac{17}{2} = \frac{629}{6} = 104\frac{5}{6} \\ 6. & 15\frac{1}{4} \times 9\frac{2}{3} = \frac{61}{4} \times \frac{29}{3} = \frac{1,769}{12} = 147\frac{5}{12} \end{aligned}$$

Appendix B.  
Drills 12-13.

500

Drill 12  
(continued).

$$\begin{aligned}
 7. \quad 27\frac{1}{2} \times 22\frac{2}{3} &= \frac{55}{2} \times \frac{68}{3} = \frac{3,740}{6} = 623\frac{1}{3}. \\
 8. \quad 21\frac{2}{3} \times 12\frac{1}{3} &= \frac{65}{3} \times \frac{37}{3} = \frac{2,405}{9} = 267\frac{2}{9}. \\
 9. \quad 32\frac{1}{4} \times 8\frac{3}{4} &= \frac{129}{4} \times \frac{35}{4} = \frac{4,515}{16} = 282\frac{3}{16}. \\
 10. \quad 27\frac{1}{2} \times 15\frac{2}{3} &= \frac{55}{2} \times \frac{47}{3} = \frac{2,585}{6} = 430\frac{5}{6}. \\
 11. \quad 21\frac{2}{3} \times 10\frac{1}{3} &= \frac{65}{3} \times \frac{31}{3} = \frac{2,015}{9} = 223\frac{8}{9}. \\
 12. \quad 32\frac{1}{4} \times 7\frac{3}{4} &= \frac{129}{4} \times \frac{31}{4} = \frac{3,999}{16} = 249\frac{15}{16}. \\
 13. \quad 20\frac{3}{4} \times 9\frac{1}{2} &= \frac{83}{4} \times \frac{19}{2} = \frac{1,577}{8} = 197\frac{1}{8}. \\
 14. \quad 15\frac{3}{4} \times 20\frac{2}{3} &= \frac{63}{4} \times \frac{62}{3} = \frac{6,51}{2} = 325\frac{1}{2}. \\
 15. \quad 18\frac{1}{4} \times 16\frac{1}{2} &= \frac{73}{4} \times \frac{33}{2} = \frac{1,825}{8} = 304\frac{1}{8}. \\
 16. \quad 12\frac{1}{4} \times 13\frac{2}{3} &= \frac{49}{4} \times \frac{41}{3} = \frac{2,009}{12} = 167\frac{5}{12}. \\
 17. \quad 16\frac{3}{4} \times 7\frac{1}{2} &= \frac{67}{4} \times \frac{15}{2} = \frac{1,005}{8} = 125\frac{5}{8}. \\
 18. \quad 21\frac{2}{3} \times 9\frac{2}{3} &= \frac{65}{3} \times \frac{29}{3} = \frac{2,523}{9} = 280\frac{1}{3}. \\
 19. \quad 36\frac{3}{8} \times 24\frac{1}{3} &= \frac{291}{8} \times \frac{73}{3} = \frac{21,243}{24} = 885\frac{1}{8}. \\
 20. \quad 32\frac{2}{3} \times 15\frac{1}{8} &= \frac{98}{3} \times \frac{121}{8} = \frac{11,858}{24} = 494\frac{1}{12}. \\
 21. \quad 27\frac{1}{2} \times 20\frac{1}{3} &= \frac{55}{2} \times \frac{61}{3} = \frac{2,255}{6} = 375\frac{5}{6}. \\
 22. \quad 25\frac{3}{8} \times 16\frac{1}{3} &= \frac{203}{8} \times \frac{49}{3} = \frac{9,947}{24} = 414\frac{11}{24}. \\
 23. \quad 18\frac{2}{3} \times 12\frac{1}{8} &= \frac{58}{3} \times \frac{47}{8} = \frac{679}{6} = 226\frac{1}{6}. \\
 24. \quad 17\frac{3}{4} \times 24\frac{1}{3} &= \frac{71}{4} \times \frac{73}{3} = \frac{5,183}{12} = 431\frac{11}{12}.
 \end{aligned}$$

Drill 13.

$$\begin{aligned}
 1. \quad 47 \div \frac{2}{3} &= \frac{47}{1} \times \frac{3}{2} = \frac{141}{2} = 70\frac{1}{2}. \\
 2. \quad 28 \div \frac{3}{4} &= \frac{28}{1} \times \frac{4}{3} = \frac{112}{3} = 37\frac{1}{3}. \\
 3. \quad 42 \div \frac{4}{5} &= \frac{42}{1} \times \frac{5}{4} = \frac{105}{2} = 52\frac{1}{2}. \\
 4. \quad 92 \div \frac{8}{9} &= \frac{92}{1} \times \frac{9}{8} = \frac{207}{2} = 103\frac{1}{2}. \\
 5. \quad 39 \div \frac{5}{6} &= \frac{39}{1} \times \frac{6}{5} = \frac{234}{5} = 46\frac{4}{5}. \\
 6. \quad 31\frac{1}{3} \div 4 &= \frac{94}{3} \times \frac{1}{4} = \frac{47}{6} = 7\frac{5}{6}. \\
 7. \quad 52\frac{1}{2} \div 6 &= \frac{105}{2} \times \frac{1}{6} = \frac{35}{4} = 8\frac{3}{4}. \\
 8. \quad 45\frac{1}{3} \div 8 &= \frac{136}{3} \times \frac{1}{8} = \frac{17}{3} = 5\frac{2}{3}. \\
 9. \quad 69\frac{3}{4} \div 9 &= \frac{279}{4} \times \frac{1}{9} = \frac{31}{4} = 7\frac{3}{4}. \\
 10. \quad 124\frac{1}{2} \div 12 &= \frac{249}{2} \times \frac{1}{12} = \frac{83}{4} = 20\frac{3}{4}. \\
 11. \quad 35 \div 4\frac{2}{3} &= \frac{35}{1} \times \frac{3}{14} = \frac{15}{2} = 7\frac{1}{2}. \\
 12. \quad 117 \div 6\frac{3}{4} &= \frac{117}{1} \times \frac{4}{27} = \frac{52}{3} = 17\frac{1}{3}.
 \end{aligned}$$



13.  $270 \div 9\frac{3}{8} = \frac{270}{1} \times \frac{8}{755} = \frac{144}{5} = 28\frac{4}{5}$
14.  $140 \div 11\frac{1}{4} = \frac{140}{1} \times \frac{4}{489} = \frac{112}{9} = 12\frac{4}{9}$
15.  $126 \div 13\frac{1}{2} = \frac{126}{1} \times \frac{2}{273} = \frac{28}{3} = 9\frac{1}{3}$
16.  $153 \div 15\frac{3}{4} = \frac{153}{1} \times \frac{4}{637} = \frac{68}{7} = 9\frac{5}{7}$
17.  $29\frac{3}{8} \div 3\frac{1}{8} = \frac{235}{81} \times \frac{81}{235} = \frac{47}{5} = 9\frac{2}{5}$
18.  $126\frac{2}{3} \div 13\frac{1}{3} = \frac{386}{21} \times \frac{3}{402} = \frac{19}{2} = 9\frac{1}{2}$
19.  $86\frac{1}{4} \div 18\frac{3}{4} = \frac{345}{41} \times \frac{4}{205} = \frac{23}{5} = 4\frac{3}{5}$
20.  $204\frac{1}{6} \div 29\frac{1}{6} = \frac{1225}{87} \times \frac{6}{127} = \frac{49}{7} = 7$
21.  $81\frac{1}{4} \div 43\frac{3}{4} = \frac{325}{14} \times \frac{4}{127} = \frac{13}{7} = 1\frac{6}{7}$
22.  $56\frac{7}{8} \div 16\frac{1}{4} = \frac{45}{28} \times \frac{4}{651} = \frac{2}{5} = 3\frac{1}{2}$
23.  $45\frac{5}{6} \div 18\frac{1}{3} = \frac{245}{62} \times \frac{3}{551} = \frac{5}{2} = 2\frac{1}{2}$
24.  $44\frac{1}{4} \div 29\frac{1}{2} = \frac{173}{42} \times \frac{2}{371} = \frac{3}{2} = 1\frac{1}{2}$
25.  $58\frac{11}{12} \div 25\frac{1}{4} = \frac{7077}{183} \times \frac{4}{101} = \frac{9}{3} = 2\frac{1}{3}$
26.  $70\frac{5}{6} \div 18\frac{3}{4} = \frac{125}{764} \times \frac{4}{271} = \frac{15}{4} = 3\frac{3}{4}$
27.  $35\frac{2}{5} \div 16\frac{2}{5} = \frac{533}{315} \times \frac{5}{826} = \frac{13}{6} = 2\frac{1}{6}$
28.  $40\frac{5}{8} \div 12\frac{3}{8} = \frac{325}{81} \times \frac{162}{1953} = \frac{10}{3} = 3\frac{1}{3}$
29.  $48\frac{3}{4} \div 7\frac{7}{8} = \frac{195}{14} \times \frac{82}{63} = \frac{390}{63} = 6\frac{4}{21}$
30.  $37\frac{1}{2} \div 16\frac{1}{2} = \frac{297}{84} \times \frac{2}{231} = \frac{9}{4} = 2\frac{1}{4}$
31.  $154\frac{1}{6} \div 24\frac{2}{3} = \frac{425}{62} \times \frac{31}{242} = \frac{25}{4} = 6\frac{1}{4}$
32.  $58\frac{1}{3} \div 12\frac{1}{2} = \frac{1757}{3} \times \frac{2}{251} = \frac{14}{3} = 4\frac{2}{3}$
33.  $46\frac{2}{3} \div 17\frac{1}{2} = \frac{1404}{3} \times \frac{2}{271} = \frac{8}{3} = 2\frac{2}{3}$
34.  $151\frac{2}{3} \div 16\frac{1}{4} = \frac{452}{3} \times \frac{4}{251} = \frac{28}{3} = 9\frac{1}{3}$
35.  $95\frac{1}{4} \div 21\frac{1}{8} = \frac{381}{42} \times \frac{83}{1671} = \frac{9}{2} = 4\frac{1}{2}$
36.  $43\frac{1}{8} \div 19\frac{1}{6} = \frac{313}{24} \times \frac{6}{1151} = \frac{9}{4} = 2\frac{1}{4}$

1.  $50\text{m} + 125\text{m} = 175\text{m}$ .
2.  $460\text{cm}^2 + 78\text{cm}^2 = 538\text{cm}^2$ .
3.  $180\text{mL} + 540\text{mL} = 720\text{mL}$ .
4.  $460\text{g} + 792\text{g} = 1252\text{g}$ .
5.  $2\text{cm} + 1.5\text{m} = 3.5\text{cm}$ .
6.  $3.5\text{km}^2 + 8.7\text{km}^2 = 12.2\text{km}^2$ .

Appendix B.  
Drills 14-16.

502

Drill 14  
(continued)

7.  $8.75 \text{ kg} + .5 \text{ kg} = 9.25 \text{ kg}.$
8.  $25.05 \text{ m} + 0.005 \text{ m} = 25.055 \text{ m}.$
9.  $6.8 \text{ m} + 50 \text{ cm} = 6.8 \text{ m} + .5 \text{ m} = 7.3 \text{ m}.$
10.  $3 \text{ km} + 1500 \text{ m} = 3 \text{ km} + 1.5 \text{ km} = 4.5 \text{ km}.$
11.  $2.3 \text{ L} + 75 \text{ mL} = 2300 \text{ mL} + 75 \text{ mL} = 2375 \text{ mL}.$
12.  $500 \text{ g} + 4.5 \text{ kg} = .5 \text{ kg} + 4.5 \text{ kg} = 5 \text{ kg}.$

Drill 15.

1.  $368 \text{ kL} - 159 \text{ kL} = 209 \text{ kL}.$
2.  $743 \text{ mm} - 265 \text{ mm} = 478 \text{ mm}.$
3.  $9046 \text{ t} - 3036 \text{ t} = 6010 \text{ t}.$
4.  $34 \text{ ha} - 26.5 \text{ ha} = 7.5 \text{ ha}.$
5.  $465 \text{ m}^2 - 0.75 \text{ m}^2 = 464.25 \text{ m}^2.$
6.  $0.85 \text{ m} - 0.45 \text{ m} = .4 \text{ m}.$
7.  $1.5 \text{ L} - 775 \text{ L} = 1.45 \text{ L}.$
8.  $800 \text{ mm} - 25 \text{ mm} = 800 \text{ mm} - 25 \text{ mm} = 775 \text{ mm}.$
9.  $1 \text{ kg} - 90 \text{ g} = 1000 \text{ g} - 90 \text{ g} = 910 \text{ g}.$
10.  $2.75 \text{ L} - 500 \text{ mL} = 2.75 \text{ L} - .5 \text{ L} = 2.25 \text{ L}.$
11.  $1 \text{ m}^2 - 250 \text{ cm}^2 = 10000 \text{ cm}^2 - 250 \text{ cm}^2 = 9750 \text{ cm}^2.$
12.  $1 \text{ m}^2 - 250 \text{ cm}^2 = 1 \text{ m}^2 - .025 \text{ m}^2 = .975 \text{ m}^2.$

Drill 16.

1.  $35 \text{ km} \times 6 = 210 \text{ km}.$
2.  $14.5 \text{ m} \times 10 = 145 \text{ m}.$
3.  $0.05 \text{ km}^2 \times 50 = 2.50 \text{ km}^2.$
4.  $1640 \text{ L} \times 25 = 41000 \text{ L}.$
5.  $850 \text{ mm} \times 0.5 = 425 \text{ mm}.$
6.  $6.5 \text{ ha} \times 20 = 130 \text{ ha}.$
7.  $4.5 \text{ m} \times 3.2 \text{ m} = 14.4 \text{ m}^2.$
8.  $2.6 \text{ kg} \times 0.2 = .52 \text{ kg}.$
9.  $0.5 \text{ L} \times 5 = 2.5 \text{ L}.$
10.  $250 \text{ mL} \times 40 = 10000 \text{ mL} = 10 \text{ L}.$
11.  $600 \text{ g} \times 0.6 = 360 \text{ g} = .36 \text{ kg}.$
12.  $100 \text{ t} \times 0.625 = 62.5 \text{ t}.$



1.  $456 \text{ m}^2 \div 3 = 152 \text{ m}^2$ .
2.  $533 \text{ ha} \div 100 = 5.33 \text{ ha}$ .
3.  $2\,400 \text{ km} \div 2 = 1\,200 \text{ km}$ .
4.  $45.5 \text{ kg} \div 5 = 9.1 \text{ kg}$ .
5.  $37.5 \text{ L} \div 0.5 = 75 \text{ L}$ .
6.  $0.5 \text{ kL} \div 4 = 0.125 \text{ kL}$ .
7.  $25 \text{ cm}^2 \div 6.25 = 4 \text{ cm}^2$ .
8.  $3.6 \text{ m} \div 4 = 0.9 \text{ m} = 90 \text{ cm}$ .
9.  $4.8 \text{ m} \div 6 = 0.8 \text{ m}$ .
10.  $650 \text{ mL} \div 50 = 13 \text{ mL}$ .
11.  $3.28 \text{ km}^2 \div 8 = .41 \text{ km}^2$ .
12.  $12\,468 \text{ t} \div 6 = 2\,078 \text{ t}$ .

- |                                 |                               |
|---------------------------------|-------------------------------|
| 1. $7.38 \times 10 = 73.8$      | 2. $9.21 \times 100 = 921$    |
| 3. $4.72 \times 1,000 = 4,720$  | 4. $6.3 \times 100 = 630$     |
| 5. $3.27 \times 10 = 32.7$      | 6. $0.596 \times 1,000 = 596$ |
| 7. $9.85 \times 100 = 985$      | 8. $5.345 \times 10 = 53.45$  |
| 9. $5.63 \times 10 = 56.3$      | 10. $4.2 \times 100 = 420$    |
| 11. $3.4 \times 1,000 = 3,400$  | 12. $42.7 \times 10 = 427$    |
| 13. $0.085 \times 100 = 8.5$    | 14. $0.071 \times 10 = .71$   |
| 15. $4.98 \times 1,000 = 4,980$ | 16. $5.08 \times 100 = 508$   |
| 17. $9.76 \times 10 = 97.6$     | 18. $0.021 \times 1,000 = 21$ |

- |                             |                              |
|-----------------------------|------------------------------|
| 1. $20 @ 65¢ = \$13.00$     | 2. $60 @ 45¢ = \$27.00$      |
| 3. $23 @ \$ .30 = \$ 6.90$  | 4. $30 @ \$ .15 = \$ 4.50$   |
| 5. $80 @ \$ .35 = \$28.00$  | 6. $35 @ 40¢ = \$14.00$      |
| 7. $20 @ \$ .70 = \$14.00$  | 8. $40 @ \$ .35 = \$14.00$   |
| 9. $65 @ 60¢ = \$39.00$     | 10. $40 @ \$ .32 = \$12.80$  |
| 11. $70 @ 15¢ = \$10.50$    | 12. $31 @ 80¢ = \$24.80$     |
| 13. $80 @ \$ .45 = \$36.00$ | 14. $60 @ 52¢ = \$31.20$     |
| 15. $22 @ 70¢ = \$15.40$    | 16. $20 @ \$ .17 = \$3.40$   |
| 17. $30 @ 55¢ = \$16.50$    | 18. $115 @ \$ .20 = \$23.00$ |

504

Drill 20.

1.  $348 \div 10 = 34.8$

2.  $1,987 \div 100 = 19.87$

3.  $847 \div 100 = 8.47$

4.  $7,240 \div 1,000 = 7.240$

5.  $360 \div 10 = 36$

6.  $93.4 \div 10 = 9.34$

7.  $73.8 \div 10 = 7.38$

8.  $9.2 \div 100 = .092$

9.  $4.7 \div 1,000 = .0047$

10.  $5.63 \div 100 = .0563$

11.  $7.2 \div 10 = .72$

12.  $20 \div 1,000 = .02$

13.  $7.3 \div 100 = .073$

14.  $9.16 \div 10 = .916$

15.  $5.9 \div 1,000 = .0059$

16.  $80 \div 100 = .8$

17.  $7.8 \div 10 = .78$

18.  $30 \div 1,000 = .03$

Drill 21.

1.  $7.38 \times 10 = 73.8$

2.  $0.042 \times 1,000 = 42$

3.  $348 \div 10 = 34.8$

4.  $420 \div 1,000 = .42$

5.  $9.20 \times 100 = 920$

6.  $0.38 \times 10 = 3.8$

7.  $198 \div 1,000 = .198$

8.  $0.38 \div 10 = .038$

9.  $6.47 \times 1,000 = 6,470$

10.  $6.9 \div 100 = .069$

11.  $0.74 \div 1,000 = .00074$

12.  $56.3 \times 100 = 5,630$

13.  $64.7 \div 1,000 = .0647$

14.  $0.069 \times 100 = 6.9$

15.  $0.38 \times 10 = 3.8$

16.  $0.21 \div 100 = .0021$

17.  $5.63 \div 100 = .0563$

18.  $0.0074 \times 1,000 = 7.4$

Drill 22.

1.  $73.8 \times 0.1 = 7.38$

2.  $9.2 \times 0.01 = .092$

3.  $647 \times 0.001 = .647$

4.  $34.1 \times 0.01 = .341$

5.  $5.31 \times 0.1 = .531$

6.  $362 \times 0.001 = .362$

7.  $83.4 \times 0.1 = 8.34$

8.  $3.85 \times 0.01 = .0385$

9.  $53.4 \times 0.1 = 5.34$

10.  $863 \times 0.1 = 86.3$

11.  $4.22 \times 0.01 = .0422$

12.  $713 \times 0.001 = .713$

13.  $62.4 \times 0.1 = 6.24$

14.  $3,420 \times 0.001 = 3.420$

15.  $4.8 \times 0.01 = .048$



1.  $73.8 \div 0.1 = 738.$
2.  $8.2 \div 0.01 = 820.$
3.  $46.7 \div 0.001 = 46,700.$
4.  $21.4 \div 0.01 = 2,140.$
5.  $3.61 \div 0.1 = 36.1.$
6.  $0.485 \div 0.001 = 485.$
7.  $72.36 \div 0.1 = 723.6.$
8.  $2.74 \div 0.01 = 274.$
9.  $6.456 \div 0.1 = 64.56.$
10.  $5.74 \div 0.1 = 57.4.$
11.  $4.33 \div 0.01 = 433.$
12.  $6.54 \div 0.001 = 6,540.$
13.  $33.6 \div 0.1 = 336.$
14.  $0.706 \div 0.001 = 706.$
15.  $0.263 \div 0.01 = 26.3.$

1.  $6.31 \div 0.1 = 63.1.$
2.  $0.042 \div 0.001 = 42.$
3.  $348 \times 0.1 = 34.8.$
4.  $420 \times 0.001 = .42.$
5.  $9.20 \div 0.01 = 920.$
6.  $0.27 \div 0.1 = 2.7.$
7.  $183 \times 0.001 = .183.$
8.  $0.52 \times 0.1 = .052.$
9.  $3.25 \div 0.001 = 3,250.$
10.  $7.4 \times 0.01 = .074.$
11.  $0.95 \times 0.001 = .00095.$
12.  $62.5 \div 0.01 = 6,250.$
13.  $8.5 \times 0.001 = .0085.$
14.  $0.012 \div 0.01 = 1.2.$
15.  $0.27 \div 0.1 = 2.7.$

1.  $2.6 \div 100 = 260.$
2.  $0.086 \div 0.01 = 8.6.$
3.  $9.7 \times 10 = 97.$
4.  $0.325 \div 0.001 = 325.$
5.  $0.55 \times 1,000 = 550.$
6.  $7.15 \times 0.01 = .0715.$
7.  $4.72 \div 10 = .472.$
8.  $6.5 \div 0.1 = 65.$
9.  $3.4 \div 10 = .34.$
10.  $0.01 \div 100 = .0001.$
11.  $27.8 \div 10 = 2.78.$
12.  $6.1 \div 0.01 = 610.$
13.  $0.021 \times 100 = 2.1.$
14.  $0.275 \div 0.01 = 27.5.$
15.  $4.2 \times 100 = 420.$
16.  $0.45 \times 0.001 = .00045.$
17.  $0.073 \times 10 = .73.$
18.  $2.6 \times 100 = 260.$
19.  $0.02 \div 10 = .002.$
20.  $0.01 \times 100 = 1.$
21.  $4.4 \times 0.1 = .44.$
22.  $4.32 \times 1,000 = 4,320.$
23.  $52.4 \div 10 = 5.24.$
24.  $0.084 \times 0.01 = .00084.$

Appendix B.  
Drills 25-28.

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Drill 25  
continued:

25.  $3.6 \div 100 = .036$ , 26.  $0.002 \times 10 = .02$ ,  
27.  $0.84 \div 0.001 = 840$ , 28.  $0.012 \times 0.1 = .0012$ ,  
29.  $0.045 \times 10 = .45$ , 30.  $0.06 \times 1,000 = 60$ .

Drill 26.

1.  $10 @ \$ .16 = \$1.60$ , 2.  $100 @ \$ .18 = \$18.00$ ,  
3.  $1,000 @ \$ .12 = \$120.00$ , 4.  $10 @ \$ .02\frac{1}{2} = \$ .25$ ,  
5.  $10 @ \$ .07\frac{1}{2} = \$ .75$ , 6.  $10 @ \$ .12\frac{1}{2} = \$1.25$ ,  
7.  $100 @ \$ .02\frac{1}{2} = \$2.50$ , 8.  $100 @ \$ .01\frac{1}{4} = \$1.25$ ,  
9.  $100 @ \$ .06\frac{1}{4} = \$6.25$ , 10.  $1,000 @ \$ .02\frac{1}{2} = \$25.00$ ,  
11.  $1,000 @ \$ .01\frac{1}{4} = \$12.50$ , 12.  $1,000 @ \$ .06\frac{1}{4} = \$62.50$ ,  
13.  $100 @ \$ .33\frac{1}{3} = \$33.33$ , 14.  $100 @ \$ .83\frac{1}{3} = \$83.33$ ,  
15.  $10 @ \$ .33\frac{1}{3} = \$3.33$ , 16.  $10 @ \$ .83\frac{1}{3} = \$8.33$ ,  
17.  $10 @ \$ .16\frac{2}{3} = \$1.67$ , 18.  $10 @ \$ .66\frac{2}{3} = \$6.67$ ,  
19.  $10 @ \$ .06\frac{1}{4} = \$ .63$ , 20.  $10 @ \$ .03\frac{3}{4} = \$ .38$ ,  
21.  $10 @ \$ .08\frac{3}{4} = \$ .88$ .

Drill 27.

1.  $65 @ 10¢ = \$6.50$ , 2.  $32 @ \$1 = \$32.00$ ,  
3.  $17 @ \$10 = \$170.00$ , 4.  $2\frac{1}{2} @ \$1 = \$2.50$ ,  
5.  $37\frac{1}{2} @ \$10 = \$375.00$ , 6.  $7\frac{1}{2} @ \$100 = \$750.00$ ,  
7.  $1\frac{1}{4} @ \$100 = \$125.00$ , 8.  $6\frac{1}{4} @ \$100 = \$625.00$ ,  
9.  $3\frac{3}{4} @ \$100 = \$375.00$ , 10.  $8\frac{3}{4} @ \$100 = \$875.00$ ,  
11.  $1\frac{1}{4} @ \$10 = \$12.50$ , 12.  $6\frac{1}{4} @ \$10 = \$62.50$ ,  
13.  $3\frac{3}{4} @ \$10 = \$37.50$ , 14.  $8\frac{3}{4} @ \$10 = \$87.50$ ,  
15.  $33\frac{1}{3} @ \$1 = \$33.33$ , 16.  $3\frac{1}{3} @ \$1 = \$3.33$ ,  
17.  $66\frac{2}{3} @ \$1 = \$66.67$ , 18.  $1\frac{1}{4} @ 10¢ = \$ .13$ ,  
19.  $6\frac{1}{4} @ 10¢ = \$ .63$ , 20.  $3\frac{3}{4} @ 10¢ = \$ .38$ ,  
21.  $8\frac{3}{4} @ 10¢ = \$ .88$ .

Drill 28.

1. 300 articles @ \$9 per C. = \$27.00.  
2. 125 cars @ \$6 per C. = \$6.25.  
3. 750 articles @ \$4 per C. = \$30.00.  
4. 150 articles @ \$12 per C. = \$18.00.



5. 1,200 pounds @ \$3.50 per cwt. = \$42.00.
6. 750 pounds @ \$4.00 per cwt. = \$30.00.
7. 450 pounds @ \$2.00 per cwt. = \$9.00.
8. 250 pounds @ \$4.00 per cwt. = \$10.00.
9. 350 pounds @ \$6.00 per cwt. = \$21.00.
10. 175 pounds @ \$12.00 per cwt. = \$21.00.
11. 1,400 articles @ \$15.00 per M. = \$21.00.
12. 1,300 articles @ \$9.00 per M. = \$11.70.
13. 2,500 articles @ \$12.00 per M. = \$30.00.
14. 9,000 pounds @ \$14.00 per T. = \$63.00.
15. 5,000 pounds @ \$18.00 per T. = \$45.00.
16. 3,000 pounds @ \$26.00 per T. = \$39.00.
17. 6,000 pounds @ \$22.00 per T. = \$66.00.
18. 2,000 kg @ \$10.00 per T. = \$20.00.
19. 1,500 kg @ \$30.00 per T. = \$45.00.
20. 800 kg @ \$50.00 per T. = \$40.00.

1.  $\frac{1}{4} + \frac{3}{16} = \frac{4}{16} + \frac{3}{16} = \frac{7}{16}$ .
2.  $\frac{1}{3} + \frac{5}{6} = \frac{2}{6} + \frac{5}{6} = \frac{7}{6} = 1\frac{1}{6}$ .
3.  $\frac{1}{6} + \frac{11}{12} = \frac{2}{12} + \frac{11}{12} = \frac{13}{12} = 1\frac{1}{12}$ .
4.  $\frac{1}{8} + \frac{15}{16} = \frac{2}{16} + \frac{15}{16} = \frac{17}{16} = 1\frac{1}{16}$ .
5.  $\frac{7}{8} + \frac{1}{16} = \frac{14}{16} + \frac{1}{16} = \frac{15}{16}$ .
6.  $\frac{5}{6} + \frac{1}{12} = \frac{10}{12} + \frac{1}{12} = \frac{11}{12}$ .
7.  $\frac{5}{8} + \frac{11}{12} = \frac{10}{12} + \frac{11}{12} = \frac{21}{12} = 1\frac{3}{4}$ .
8.  $\frac{1}{2} + \frac{2}{3} = \frac{3}{6} + \frac{4}{6} = \frac{7}{6} = 1\frac{1}{6}$ .
9.  $\frac{5}{6} + \frac{1}{3} = \frac{10}{12} + \frac{4}{12} = \frac{14}{12} = 1\frac{1}{3}$ .
10.  $\frac{1}{3} + \frac{3}{4} = \frac{4}{12} + \frac{9}{12} = \frac{13}{12} = 1\frac{1}{12}$ .
11.  $\frac{3}{4} + \frac{1}{6} = \frac{9}{12} + \frac{2}{12} = \frac{11}{12}$ .
12.  $\frac{2}{3} + \frac{1}{5} = \frac{10}{15} + \frac{3}{15} = \frac{13}{15}$ .
13.  $\frac{5}{8} - \frac{3}{16} = \frac{10}{16} - \frac{3}{16} = \frac{7}{16}$ .
14.  $\frac{2}{3} - \frac{1}{6} = \frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$ .
15.  $\frac{11}{12} - \frac{1}{4} = \frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$ .
16.  $\frac{5}{6} - \frac{1}{3} = \frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$ .
17.  $\frac{7}{12} - \frac{1}{4} = \frac{7}{12} - \frac{3}{12} = \frac{4}{12} = \frac{1}{3}$ .
18.  $\frac{2}{3} - \frac{1}{5} = \frac{10}{15} - \frac{3}{15} = \frac{7}{15}$ .
19.  $\frac{1}{4} + \frac{1}{8} + \frac{1}{2} = \frac{2}{8} + \frac{1}{8} + \frac{4}{8} = \frac{7}{8}$ .
20.  $\frac{1}{3} + \frac{1}{6} + \frac{1}{2} = \frac{2}{6} + \frac{1}{6} + \frac{3}{6} = \frac{6}{6} = 1$ .
1.  $\frac{1}{4} + \frac{3}{8} + \frac{1}{2} = \frac{2}{8} + \frac{3}{8} + \frac{4}{8} = \frac{9}{8} = 1\frac{1}{8}$ .
2.  $\frac{7}{8} + \frac{1}{2} + \frac{3}{4} = \frac{7}{8} + \frac{4}{8} + \frac{6}{8} = \frac{17}{8} = 2\frac{1}{8}$ .
3.  $\frac{1}{3} + \frac{1}{2} + \frac{5}{6} = \frac{2}{6} + \frac{3}{6} + \frac{5}{6} = \frac{10}{6} = 1\frac{2}{3}$ .
4.  $\frac{1}{2} + \frac{1}{4} + \frac{5}{8} = \frac{4}{8} + \frac{2}{8} + \frac{5}{8} = \frac{11}{8} = 1\frac{3}{8}$ .

Appendix B.  
Drills 30-31.

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Drill 30.

1.  $\frac{1}{3} \times \frac{2}{3} = \frac{2}{9}$ .

3.  $\frac{1}{4}$  of  $\frac{4}{5} = \frac{1}{5}$ .

5.  $\frac{1}{5}$  of  $\frac{4}{5} = \frac{4}{25}$ .

7.  $\frac{1}{6}$  of  $\frac{3}{5} = \frac{1}{10}$ .

9.  $\frac{1}{8}$  of  $\frac{15}{16} = \frac{15}{128}$ .

11.  $\frac{3}{15}$  of  $\frac{3}{16} = \frac{3}{80}$ .

13.  $\frac{1}{3} \div \frac{1}{2} = \frac{1}{3} \times 2 = \frac{2}{3}$ .

15.  $\frac{1}{6} \div \frac{1}{4} = \frac{1}{6} \times 4 = \frac{4}{6} = \frac{2}{3}$ .

17.  $\frac{2}{5} \div \frac{4}{5} = \frac{2}{5} \times \frac{5}{4} = \frac{1}{2}$ .

19.  $\frac{3}{8} \div \frac{1}{2} = \frac{3}{8} \times 2 = \frac{6}{8} = \frac{3}{4}$ .

21.  $\frac{3}{4} \div \frac{9}{10} = \frac{3}{4} \times \frac{10}{9} = \frac{2}{3}$ .

23.  $\frac{1}{3} \div \frac{1}{3} = \frac{1}{3} \times 3 = 1$ .

25.  $\frac{3}{4} \div \frac{3}{10} = \frac{3}{4} \times \frac{10}{3} = \frac{10}{4} = 2\frac{1}{2}$ .

27.  $\frac{9}{10} \div \frac{3}{10} = \frac{9}{10} \times \frac{10}{3} = 3$ .

29.  $\frac{2}{3} \div \frac{2}{9} = \frac{2}{3} \times \frac{9}{2} = 3$ .

2.  $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$ .

4.  $\frac{1}{12} \times \frac{3}{8} = \frac{1}{32}$ .

6.  $\frac{1}{12}$  of  $\frac{5}{16} = \frac{5}{192}$ .

8.  $\frac{1}{10} \times \frac{2}{5} = \frac{1}{25}$ .

10.  $\frac{1}{14} \times \frac{2}{7} = \frac{1}{49}$ .

12.  $\frac{1}{10}$  of  $\frac{1}{10} = \frac{1}{100}$ .

14.  $\frac{3}{8} \div \frac{2}{3} = \frac{3}{8} \times \frac{3}{2} = \frac{9}{16}$ .

16.  $\frac{3}{8} \div \frac{5}{8} = \frac{3}{8} \times \frac{8}{5} = \frac{3}{5}$ .

18.  $\frac{1}{9} \div \frac{2}{3} = \frac{1}{9} \times \frac{3}{2} = \frac{1}{6}$ .

20.  $\frac{1}{15} \div \frac{1}{3} = \frac{1}{15} \times 3 = \frac{1}{5}$ .

22.  $\frac{2}{3} \div \frac{1}{9} = \frac{2}{3} \times 9 = 6$ .

24.  $\frac{1}{3} \div \frac{1}{4} = \frac{1}{3} \times 4 = \frac{4}{3} = 1\frac{1}{3}$ .

26.  $\frac{2}{3} \div \frac{1}{3} = \frac{2}{3} \times 3 = 2$ .

28.  $\frac{5}{8} \div \frac{3}{8} = \frac{5}{8} \times \frac{8}{3} = \frac{5}{3} = 1\frac{2}{3}$ .

30.  $\frac{3}{4} \div \frac{5}{8} = \frac{3}{4} \times \frac{8}{5} = \frac{6}{5} = 1\frac{1}{5}$ .

Drill 31.

1.  $\frac{2}{3} - \frac{1}{4} = \frac{8}{12} - \frac{3}{12} = \frac{5}{12}$ .

3.  $\frac{1}{2} \times \frac{6}{7} = \frac{6}{14} = \frac{3}{7}$ .

5.  $\frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3} = \frac{8}{9}$ .

7.  $\frac{2}{3} + \frac{1}{4} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$ .

9.  $\frac{1}{4} \div \frac{5}{6} = \frac{1}{4} \times \frac{6}{5} = \frac{3}{10}$ .

11.  $\frac{3}{4} \times \frac{10}{25} = \frac{30}{100} = \frac{3}{10}$ .

13.  $\frac{2}{3} + \frac{5}{6} = \frac{4}{6} + \frac{5}{6} = \frac{9}{6} = \frac{3}{2} = 1\frac{1}{2}$ .

15.  $\frac{1}{2} - \frac{1}{3} = \frac{3}{6} - \frac{2}{6} = \frac{1}{6}$ .

17.  $\frac{3}{10} \div \frac{1}{10} = \frac{3}{10} \times 10 = 3$ .

19.  $\frac{2}{3}$  of  $\frac{15}{2} = \frac{2}{3} \times \frac{15}{2} = 5$ .

21.  $\frac{3}{4} - \frac{5}{12} = \frac{9}{12} - \frac{5}{12} = \frac{4}{12} = \frac{1}{3}$ .

23.  $\frac{3}{4} + \frac{1}{6} = \frac{9}{12} + \frac{2}{12} = \frac{11}{12}$ .

25.  $\frac{5}{12} \times \frac{4}{3} = \frac{20}{36} = \frac{5}{9}$ .

27.  $\frac{7}{9} \div \frac{2}{3} = \frac{7}{9} \times \frac{3}{2} = \frac{7}{6} = 1\frac{1}{6}$ .

29.  $\frac{2}{3} \div \frac{8}{9} = \frac{2}{3} \times \frac{9}{8} = \frac{3}{4}$ .

2.  $\frac{1}{4} \div \frac{1}{3} = \frac{1}{4} \times 3 = \frac{3}{4}$ .

4.  $\frac{2}{5} + \frac{7}{10} = \frac{4}{10} + \frac{7}{10} = \frac{11}{10} = 1\frac{1}{10}$ .

6.  $\frac{5}{12} - \frac{1}{3} = \frac{5}{12} - \frac{4}{12} = \frac{1}{12}$ .

8.  $\frac{3}{15}$  of  $\frac{10}{3} = \frac{3}{15} \times \frac{10}{3} = \frac{2}{3}$ .

10.  $\frac{2}{5} + \frac{3}{4} = \frac{8}{20} + \frac{15}{20} = \frac{23}{20} = 1\frac{3}{20}$ .

12.  $\frac{5}{6} - \frac{1}{12} = \frac{10}{12} - \frac{1}{12} = \frac{9}{12} = \frac{3}{4}$ .

14.  $\frac{5}{9} \div \frac{7}{9} = \frac{5}{9} \times \frac{9}{7} = \frac{5}{7}$ .

16.  $\frac{21}{12}$  of  $\frac{1}{21} = \frac{21}{12} \times \frac{1}{21} = \frac{1}{12}$ .

18.  $\frac{5}{12} - \frac{1}{6} = \frac{5}{12} - \frac{2}{12} = \frac{3}{12} = \frac{1}{4}$ .

20.  $\frac{2}{9} \div \frac{2}{3} = \frac{2}{9} \times \frac{3}{2} = \frac{1}{3}$ .

22.  $\frac{4}{5} \div \frac{3}{5} = \frac{4}{5} \times \frac{5}{3} = \frac{4}{3} = 1\frac{1}{3}$ .

24.  $\frac{3}{15} \div \frac{2}{5} = \frac{3}{15} \times \frac{5}{2} = \frac{1}{2}$ .

26.  $\frac{2}{3} - \frac{1}{4} = \frac{8}{12} - \frac{3}{12} = \frac{5}{12}$ .

28.  $\frac{3}{5} - \frac{1}{4} = \frac{12}{20} - \frac{5}{20} = \frac{7}{20}$ .

30.  $\frac{1}{8} + \frac{5}{12} = \frac{3}{24} + \frac{10}{24} = \frac{13}{24}$ .



$$\begin{aligned}
 31. \quad \frac{3}{4} + \frac{1}{8} + \frac{1}{2} &= \frac{6}{8} + \frac{1}{8} + \frac{4}{8} = \frac{11}{8} = 1\frac{3}{8} \\
 32. \quad \frac{1}{4} + \frac{7}{8} + \frac{1}{2} &= \frac{2}{8} + \frac{7}{8} + \frac{4}{8} = \frac{13}{8} = 1\frac{5}{8} \\
 33. \quad \frac{5}{6} + \frac{1}{2} + \frac{2}{3} &= \frac{5}{6} + \frac{3}{6} + \frac{4}{6} = \frac{12}{6} = 2 \\
 34. \quad \frac{3}{4} + \frac{1}{2} + \frac{3}{8} &= \frac{6}{8} + \frac{4}{8} + \frac{3}{8} = \frac{13}{8} = 1\frac{5}{8} \\
 35. \quad \frac{1}{2} + \frac{1}{6} + \frac{2}{3} &= \frac{3}{6} + \frac{1}{6} + \frac{4}{6} = \frac{8}{6} = 1\frac{2}{3} \\
 36. \quad \frac{1}{3} \times \frac{21}{14} \times \frac{41}{5} &= \frac{1}{5} \\
 37. \quad \frac{21}{13} \times \frac{21}{8} \times \frac{1}{21} &= \frac{1}{8} \\
 38. \quad \frac{51}{13} \times \frac{2}{3} \times \frac{21}{21} &= \frac{2}{9} \\
 39. \quad \frac{31}{12} \times \frac{21}{21} \times \frac{43}{7} &= \frac{3}{7} \\
 40. \quad \frac{21}{3} \times \frac{7}{2} \times \frac{41}{5} &= \frac{7}{15}
 \end{aligned}$$

$$\begin{aligned}
 1. \quad 0.25 &= 25\% \\
 2. \quad 0.37 &= 37\% \\
 3. \quad 0.123 &= 12.3\% \\
 4. \quad 0.03 &= 3\% \\
 5. \quad 0.004 &= .4\% \\
 6. \quad 0.0035 &= .35\% \\
 7. \quad 1.25 &= 125\% \\
 8. \quad 2.45 &= 245\% \\
 9. \quad 3 &= 300\% \\
 10. \quad 2 &= 200\% \\
 11. \quad 0.425 &= 42.5\% \\
 12. \quad 0.0075 &= .75\% \\
 13. \quad 1\frac{1}{2} &= 150\% \\
 14. \quad 1\frac{1}{3} &= 133\frac{1}{3}\% \\
 15. \quad 0.20 &= 20\% \\
 16. \quad 0.0625 &= 6.25\% \\
 17. \quad 1\frac{3}{4} &= 175\% \\
 18. \quad 1\frac{2}{3} &= 166\frac{2}{3}\% \\
 19. \quad 0.001 &= .1\% \\
 20. \quad 1.5 &= 150\%
 \end{aligned}$$

$$\begin{aligned}
 1. \quad 75\% &= .75 \\
 2. \quad 46\% &= .46 \\
 3. \quad 3.5\% &= .035 \\
 4. \quad 0.2\% &= .002 \\
 5. \quad 175\% &= 1.75 \\
 6. \quad 225\% &= 2.25 \\
 7. \quad 300\% &= 3 \\
 8. \quad 4\% &= .04 \\
 9. \quad 1\% &= .01 \\
 10. \quad \frac{1}{2}\% &= .005 \\
 11. \quad \frac{1}{4}\% &= .0025 \\
 12. \quad \frac{2}{3}\% &= .0066\frac{2}{3} \\
 13. \quad 200\% &= 2 \\
 14. \quad \frac{3}{4}\% &= .0075 \\
 15. \quad 100\% &= 1 \\
 16. \quad 0.15\% &= .0015 \\
 17. \quad \frac{2}{5}\% &= .004 \\
 18. \quad \frac{1}{8}\% &= .00125 \\
 19. \quad 0.125\% &= .00125 \\
 20. \quad \frac{1}{3}\% &= .0033\frac{1}{3}
 \end{aligned}$$

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Drill 34.

- |  |  |
|--|--|
| 1. $17\% = \frac{17}{100}$ .                     | 2. $3\% = \frac{3}{100}$ .                       |
| 3. $2.3\% = \frac{23}{1,000}$ .                  | 4. $1.9\% = \frac{19}{1,000}$ .                  |
| 5. $6\% = \frac{6}{100} = \frac{3}{50}$ .        | 6. $14\% = \frac{14}{100} = \frac{7}{50}$ .      |
| 7. $8\% = \frac{8}{100} = \frac{2}{25}$ .        | 8. $12\% = \frac{12}{100} = \frac{3}{25}$ .      |
| 9. $1.3\% = \frac{13}{1,000}$ .                  | 10. $1.4\% = \frac{14}{1,000} = \frac{7}{500}$ . |
| 11. $0.8\% = \frac{8}{1,000} = \frac{1}{125}$ .  | 12. $0.5\% = \frac{5}{1,000} = \frac{1}{200}$ .  |
| 13. $1.5\% = \frac{15}{1,000} = \frac{3}{200}$ . | 14. $5\% = \frac{5}{100} = \frac{1}{20}$ .       |
| 15. $4\% = \frac{4}{100} = \frac{1}{25}$ .       | 16. $35\% = \frac{35}{100} = \frac{7}{20}$ .     |
| 17. $24\% = \frac{24}{100} = \frac{6}{25}$ .     | 18. $2.8\% = \frac{28}{1,000} = \frac{7}{250}$ . |
| 19. $1.2\% = \frac{12}{1,000} = \frac{3}{250}$ . | 20. $34\% = \frac{34}{100} = \frac{17}{50}$ .    |

Drill 35.

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|---|---|
| 1. $12\frac{1}{2}\%$ of \$32 = \$4.     | 2. $75\%$ of \$28 = \$21.               |
| 3. $83\frac{1}{3}\%$ of \$42 = \$35.    | 4. $66\frac{2}{3}\%$ of \$33 = \$22.    |
| 5. $87\frac{1}{2}\%$ of \$48 = \$42.    | 6. $37\frac{1}{2}\%$ of \$64 = \$24.    |
| 7. $33\frac{1}{3}\%$ of \$36 = \$12.    | 8. $87\frac{1}{2}\%$ of \$72 = \$63.    |
| 9. $62\frac{1}{2}\%$ of \$40 = \$25.    | 10. $33\frac{1}{3}\%$ of \$129 = \$43.  |
| 11. $16\frac{2}{3}\%$ of \$78 = \$13.   | 12. $66\frac{2}{3}\%$ of \$45 = \$30.   |
| 13. $25\%$ of \$26 = \$6.50.            | 14. $12\frac{1}{2}\%$ of \$65 = \$8.13. |
| 15. $25\%$ of \$29 = \$7.25.            | 16. $50\%$ of \$43 = \$21.50.           |
| 17. $16\frac{2}{3}\%$ of \$39 = \$6.50. | 18. $12\frac{1}{2}\%$ of \$50 = \$6.25. |

Drill 36.

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| 1. $1\%$ of \$40 = \$.40.         | 2. $10\%$ of \$82 = \$8.20.        |
| 3. $100\%$ of \$39 = \$39.00.     | 4. $1,000\%$ of \$32 = \$320.00.   |
| 5. $10\%$ of \$24 = \$2.40.       | 6. $1\%$ of \$76 = \$.76.          |
| 7. $1\%$ of \$120 = \$1.20.       | 8. $10\%$ of \$65 = \$6.50.        |
| 9. $1\%$ of \$125 = \$1.25.       | 10. $1,000\%$ of \$2.15 = \$21.50. |
| 11. $100\%$ of \$78 = \$78.00.    | 12. $1\%$ of \$150 = \$1.50.       |
| 13. $1,000\%$ of \$.56 = \$5.60.  | 14. $1\%$ of \$6.95 = \$.07.       |
| 15. $100\%$ of \$35.40 = \$35.40. | 16. $10\%$ of \$8.17 = \$.82.      |
| 17. $1\%$ of \$35.40 = \$.35.     | 18. $1,000\%$ of \$4.60 = \$46.00. |



511

1. 25% of \$1 = \$.25.
2. 66 $\frac{2}{3}$ % of \$10 = \$6.67.
3. 62 $\frac{1}{2}$ % of \$100 = \$62.50.
4. 83 $\frac{1}{3}$ % of \$1,000 = \$833.33.
5. 75% of \$100 = \$75.00.
6. 37 $\frac{1}{2}$ % of \$10 = \$37.50.
7. 1% of \$100 = \$1.00.
8. 87 $\frac{1}{2}$ % of \$1 = \$.88.
9. 75% of \$10 = \$7.50.
10. 16 $\frac{2}{3}$ % of \$100 = \$16.67.
11. 12 $\frac{1}{2}$ % of \$10 = \$1.25.
12. 83 $\frac{1}{3}$ % of \$100 = \$83.33.
13. 66 $\frac{2}{3}$ % of \$1 = \$.67.
14. 25% of \$10 = \$2.50.
15. 75% of \$1,000 = \$750.
16. 1 $\frac{1}{2}$ % of \$100 = \$1.50.
17. 1 $\frac{1}{4}$ % of \$1,000 = \$10.25.
18. 7 $\frac{1}{2}$ % of \$10 = \$.75.

1. 1% of \$700 = \$7.00.
2.  $\frac{1}{2}$ % of \$600 = \$3.00.
3.  $\frac{1}{4}$ % of \$800 = \$2.00.
4.  $\frac{1}{3}$ % of \$1,200 = \$4.00.
5.  $\frac{1}{5}$ % of \$1,000 = \$2.00.
6.  $\frac{1}{8}$ % of \$2,400 = \$3.00.
7. 1% of \$525 = \$5.25.
8.  $\frac{2}{3}$ % of \$1,500 = \$10.00.
9.  $\frac{1}{2}$ % of \$1,250 = \$6.25.
10.  $\frac{3}{4}$ % of \$600 = \$4.50.
11.  $\frac{3}{8}$ % of \$1,600 = \$6.00.
12.  $\frac{1}{10}$ % of \$1,575 = \$1.58.
13.  $\frac{1}{10}$ % of \$1,828 = \$1.83.
14.  $\frac{1}{2}$ % of \$100 = \$.50.
15.  $\frac{2}{3}$ % of \$100 = \$.67.
16.  $\frac{3}{4}$ % of \$520 = \$3.90.
17.  $\frac{3}{4}$ % of \$100 = \$.75.
18.  $\frac{3}{8}$ % of \$400 = \$1.50.

1. 36 @ 25¢ = \$9.00.
2. 16 @ 75¢ = \$12.00.
3. 160 @ \$.50 = \$80.00.
4. 28 @ \$.75 = \$21.00.
5. 120 @ \$.25 = \$30.00.
6. 210 @ 50¢ = \$105.00.
7. 48 @ \$.25 = \$12.00.
8. 32 @ 75¢ = \$24.00.
9. 28 @ \$.25 = \$7.00.
10. 180 @ \$.50 = \$90.00.
11. 24 @ \$.75 = \$18.00.
12. 230 @ 50¢ = \$115.00.
13. 16 @ \$.25 = \$4.00.
14. 290 @ 50¢ = \$145.00.
15. 280 @ 75¢ = \$210.00.

Appendix B.  
Drills 40-42.

512

Drill 40.

- |  |   |
|--|---|
| 1. 72 @ $\$.12\frac{1}{2} = \$9.00.$       | 2. 24 @ $62\frac{1}{2}\text{¢} = \$15.00.$  |
| 3. 32 @ $37\frac{1}{2}\text{¢} = \$12.00.$ | 4. 16 @ $\$.87\frac{1}{2} = \$14.00.$       |
| 5. 56 @ $\$.37\frac{1}{2} = \$21.00.$      | 6. 72 @ $\$.62\frac{1}{2} = \$45.00.$       |
| 7. 64 @ $12\frac{1}{2}\text{¢} = \$8.00.$  | 8. 32 @ $\$.87\frac{1}{2} = \$28.00.$       |
| 9. 16 @ $62\frac{1}{2}\text{¢} = \$10.00.$ | 10. 24 @ $\$.87\frac{1}{2} = \$21.00.$      |
| 11. 48 @ $\$.37\frac{1}{2} = \$18.00.$     | 12. 32 @ $\$.12\frac{1}{2} = \$4.00.$       |
| 13. 40 @ $\$.62\frac{1}{2} = \$25.00.$     | 14. 96 @ $12\frac{1}{2}\text{¢} = \$12.00.$ |
| 15. 48 @ $\$.62\frac{1}{2} = \$30.00.$     | 16. 24 @ $37\frac{1}{2}\text{¢} = \$9.00.$  |
| 17. 56 @ $\$.12\frac{1}{2} = \$7.00.$      | 18. 80 @ $87\frac{1}{2}\text{¢} = \$70.00.$ |

Drill 41.

- |  |  |
|--|--|
| 1. 36 @ $75\text{¢} = \$27.00.$            | 2. 64 @ $\$.62\frac{1}{2} = \$40.00.$        |
| 3. 250 @ $50\text{¢} = \$125.00.$          | 4. 72 @ $\$.37\frac{1}{2} = \$27.00.$        |
| 5. 120 @ $\$.25 = \$30.00.$                | 6. 48 @ $12\frac{1}{2}\text{¢} = \$6.00.$    |
| 7. 80 @ $62\frac{1}{2}\text{¢} = \$50.00.$ | 8. 56 @ $\$.87\frac{1}{2} = \$49.00.$        |
| 9. 84 @ $25\text{¢} = \$21.00.$            | 10. 160 @ $75\text{¢} = \$120.00.$           |
| 11. 88 @ $\$.37\frac{1}{2} = \$33.00.$     | 12. 32 @ $62\frac{1}{2}\text{¢} = \$20.00.$  |
| 13. 240 @ $\$.12\frac{1}{2} = \$30.00.$    | 14. 40 @ $\$.87\frac{1}{2} = \$35.00.$       |
| 15. 350 @ $\$.50 = \$175.00.$              | 16. 48 @ $87\frac{1}{2}\text{¢} = \$42.00.$  |
| 17. 364 @ $\$.25 = \$91.00.$               | 18. 64 @ $\$.37\frac{1}{2} = \$24.00.$       |
| 19. 88 @ $75\text{¢} = \$66.00.$           | 20. 320 @ $12\frac{1}{2}\text{¢} = \$40.00.$ |
| 21. 218 @ $50\text{¢} = \$109.00.$         |  |

Drill 42.

- |  |  |
|--|--|
| 1. 27 @ $33\frac{1}{3}\text{¢} = \$9.00.$    | 2. 18 @ $66\frac{2}{3}\text{¢} = \$12.00.$   |
| 3. 72 @ $\$.16\frac{2}{3} = \$12.00.$        | 4. 24 @ $\$.83\frac{1}{3} = \$20.00.$        |
| 5. 21 @ $66\frac{2}{3}\text{¢} = \$14.00.$   | 6. 39 @ $\$.33\frac{1}{3} = \$13.00.$        |
| 7. 36 @ $\$.83\frac{1}{3} = \$30.00.$        | 8. 24 @ $66\frac{2}{3}\text{¢} = \$16.00.$   |
| 9. 42 @ $\$.33\frac{1}{3} = \$14.00.$        | 10. 120 @ $16\frac{2}{3}\text{¢} = \$20.00.$ |
| 11. 48 @ $83\frac{1}{3}\text{¢} = \$40.00.$  | 12. 540 @ $\$.16\frac{2}{3} = \$90.00.$      |
| 13. 45 @ $\$.33\frac{1}{3} = \$15.00.$       | 14. 126 @ $\$.16\frac{2}{3} = \$21.00.$      |
| 15. 36 @ $66\frac{2}{3}\text{¢} = \$24.00.$  | 16. 120 @ $\$.33\frac{1}{3} = \$40.00.$      |
| 17. 240 @ $16\frac{2}{3}\text{¢} = \$40.00.$ | 18. 600 @ $\$.66\frac{2}{3} = \$400.00.$     |



1. 32 @ \$ .12 $\frac{1}{2}$  = \$4.00.
2. 54 @ 83 $\frac{1}{3}$ ¢ = \$45.00.
3. 64 @ \$ .87 $\frac{1}{2}$  = \$56.00.
4. 80 @ 75¢ = \$60.00.
5. 48 @ 16 $\frac{2}{3}$ ¢ = \$8.00.
6. 56 @ \$.62 $\frac{1}{2}$  = \$35.00.
7. 84 @ \$.50 = \$42.00.
8. 27 @ 66 $\frac{2}{3}$ ¢ = \$18.00.
9. 40 @ \$.37 $\frac{1}{2}$  = \$15.00.
10. 88 @ 25¢ = \$22.00.
11. 24 @ \$.33 $\frac{1}{3}$  = \$8.00.
12. 72 @ \$.62 $\frac{1}{2}$  = \$45.00.
13. 92 @ 50¢ = \$46.00.
14. 60 @ 66 $\frac{2}{3}$ ¢ = \$40.00.
15. 96 @ \$.37 $\frac{1}{2}$  = \$36.00.
16. 124 @ 25¢ = \$31.00.
17. 150 @ \$.33 $\frac{1}{3}$  = \$50.00.
18. 88 @ \$.12 $\frac{1}{2}$  = \$11.00.
19. 72 @ 87 $\frac{1}{2}$ ¢ = \$63.00.
20. 84 @ 75¢ = \$63.00.
21. 96 @ \$.16 $\frac{2}{3}$  = \$16.00.

1. 45 @ 20¢ = \$9.00.
2. 85 @ 40¢ = \$34.00.
3. 35 @ \$.20 = \$7.00.
4. 95 @ \$.40 = \$38.00.
5. 35 @ 60¢ = \$21.00.
6. 15 @ 80¢ = \$12.00.
7. 55 @ \$.60 = \$33.00.
8. 65 @ \$.80 = \$52.00.
9. 135 @ \$.20 = \$27.00.
10. 145 @ \$.80 = \$116.00.
11. 110 @ \$.60 = \$66.00.
12. 155 @ \$.40 = \$62.00.

1. 180 @ 33 $\frac{1}{3}$ ¢ = \$60.00.
2. 48 @ 75¢ = \$36.00.
3. 185 @ 20¢ = \$37.00.
4. 160 @ 87 $\frac{1}{2}$ ¢ = \$140.00.
5. 140 @ 50¢ = \$70.00.
6. 120 @ \$.83 $\frac{1}{3}$  = \$100.00.
7. 32 @ \$.62 $\frac{1}{2}$  = \$20.00.
8. 128 @ 25¢ = \$32.00.
9. 360 @ 16 $\frac{2}{3}$ ¢ = \$60.00.
10. 480 @ 37 $\frac{1}{2}$ ¢ = \$180.00.
11. 160 @ \$.40 = \$64.00.
12. 180 @ \$.66 $\frac{2}{3}$  = \$120.00.
13. 64 @ \$.12 $\frac{1}{2}$  = \$8.00.
14. 135 @ \$.20 = \$27.00.
15. 480 @ \$.16 $\frac{2}{3}$  = \$80.00.
16. 56 @ 37 $\frac{1}{2}$ ¢ = \$21.00.
17. 350 @ \$.80 = \$280.00.
18. 600 @ 66 $\frac{2}{3}$ ¢ = \$400.00.
19. 120 @ \$.12 $\frac{1}{2}$  = \$15.00.
20. 15 @ \$.60 = \$9.00.

Appendix B.  
Drills 45-47.

5/4  
Drill 45  
(continued).

- |   |  |
|---|--|
| 21. 450 @ $\$.33\frac{1}{2}$ = \$150.00.  | 22. 240 @ $\$.75$ = \$180.00.            |
| 23. 155 @ $40\phi$ = \$62.00.             | 24. 240 @ $\$.87\frac{1}{2}$ = \$210.00. |
| 25. 180 @ $50\phi$ = \$90.00.             | 26. 36 @ $\$.83\frac{1}{3}$ = \$30.00.   |
| 27. 160 @ $62\frac{1}{2}\phi$ = \$100.00. | 28. 240 @ $25\phi$ = \$60.00.            |
| 29. 540 @ $\$.16\frac{2}{3}$ = \$90.00.   | 30. 32 @ $\$.12\frac{1}{2}$ = \$4.00.    |

- Drill 46.
- |   |   |
|---|---|
| 1. 24 @ $\$.12\frac{1}{2}$ = \$27.00.   | 2. 14 @ $\$2.50$ = \$35.00.               |
| 3. 48 @ $\$.125$ = \$60.00.             | 4. 15 @ $\$.10$ = \$16.50.                |
| 5. 80 @ $\$.150$ = \$120.00.            | 6. 60 @ $\$.125$ = \$75.00.               |
| 7. 72 @ $\$.112\frac{1}{2}$ = \$81.00.  | 8. 25 @ $\$.10$ = \$27.50.                |
| 9. 20 @ $\$.150$ = \$135.00.            | 10. 16 @ $\$.250$ = \$40.00.              |
| 11. 160 @ $\$.150$ = \$240.00.          | 12. 120 @ $\$.125$ = \$150.00.            |
| 13. 140 @ $\$.250$ = \$350.00.          | 14. 35 @ $\$.10$ = \$38.50.               |
| 15. 96 @ $\$.12\frac{1}{2}$ = \$108.00. | 16. 320 @ $\$.250$ = \$800.00.            |
| 17. 250 @ $\$.150$ = \$375.00.          | 18. 120 @ $\$.10$ = \$132.00.             |
| 19. 240 @ $\$.125$ = \$300.00.          | 20. 104 @ $\$.112\frac{1}{2}$ = \$117.00. |
| 21. 420 @ $\$.150$ = \$630.00.          |   |

- Drill 47.
- |   |  |
|---|--|
| 1. $33\frac{1}{3}$ @ $15\phi$ = \$5.00.   | 2. 75 @ $28\phi$ = \$21.00.                |
| 3. $87\frac{1}{2}$ @ $\$.48$ = \$42.00.   | 4. 50 @ $\$.38$ = \$19.00.                 |
| 5. $83\frac{1}{3}$ @ $24\phi$ = \$20.00.  | 6. $62\frac{1}{2}$ @ $\$.32$ = \$20.00.    |
| 7. 25 @ $48\phi$ = \$12.00.               | 8. $16\frac{2}{3}$ @ $\$.18$ = \$3.00.     |
| 9. 20 @ $\$.55$ = \$11.00.                | 10. $37\frac{1}{2}$ @ $\$.32$ = \$12.00.   |
| 11. $66\frac{2}{3}$ @ $24\phi$ = \$16.00. | 12. $12\frac{1}{2}$ @ $\$.48$ = \$6.00.    |
| 13. 60 @ $60\phi$ = \$36.00.              | 14. $37\frac{1}{2}$ @ $64\phi$ = \$24.00.  |
| 15. 40 @ $55\phi$ = \$22.00.              | 16. $12\frac{1}{2}$ @ $64\phi$ = \$8.00.   |
| 17. $33\frac{1}{3}$ @ $\$.45$ = \$15.00.  | 18. 80 @ $\$.15$ = \$12.00.                |
| 19. 75 @ $\$.88$ = \$66.00.               | 20. $87\frac{1}{2}$ @ $\$.240$ = \$210.00. |
| 21. 50 @ $\$.84$ = \$42.00.               | 22. 20 @ $\$.150$ = \$30.00.               |
| 23. $62\frac{1}{2}$ @ $56\phi$ = \$35.00. | 24. 25 @ $\$.160$ = \$40.00.               |
| 25. $16\frac{2}{3}$ @ $\$.48$ = \$8.00.   | 26. $12\frac{1}{2}$ @ $72\phi$ = \$9.00.   |
| 27. 60 @ $35\phi$ = \$21.00.              |  |



1. 125 @ 16¢ = \$20.00.
2. 250 @ 12¢ = \$30.00.
3. 150 @ 22¢ = \$33.00.
4. 175 @ \$.12 = \$21.00.
5. 250 @ \$.14 = \$35.00.
6. 150 @ 18¢ = \$27.00.
7. 125 @ 12¢ = \$15.00.
8. 120 @ \$.25 = \$30.00.
9. 175 @ \$.16 = \$28.00.
10. 125 @ \$.28 = \$35.00.
11. 250 @ 16¢ = \$40.00.
12. 150 @ 14¢ = \$21.00.
13. 125 @ \$.24 = \$30.00.
14. 250 @ 18¢ = \$45.00.
15. 150 @ \$1.40 = \$210.00.
16. 160 @ \$.35 = \$56.00.
17. 150 @ \$1.80 = \$270.00.
18. 175 @ \$1.20 = \$210.00.
19. 250 @ \$1.40 = \$350.00.
20. 125 @ \$1.60 = \$200.00.
21. 150 @ \$4.40 = \$660.00.
22. 125 @ \$2.40 = \$300.00.
23. 175 @ \$1.60 = \$280.00.
24. 180 @ \$.55 = \$99.00.

1. 150 items @  $33\frac{1}{3}$ ¢ = \$50.00.
2. 25 bushels @ \$2.16 = \$54.00.
3. 87 feet @  $33\frac{1}{3}$ ¢ = \$29.00.
4. 56 boxes @  $37\frac{1}{2}$ ¢ = \$21.00.
5.  $16\frac{2}{3}$  yards @ 72¢ = \$12.00.
6. 84 quarts @ 75¢ = \$63.00.
7. 104 yards @ 25¢ = \$26.00.
8. 75 dozen @ 60¢ = \$45.00.
9. 64 pounds @  $87\frac{1}{2}$ ¢ = \$56.00.
10. 315 items @  $33\frac{1}{3}$ ¢ = \$105.00.
11. 125 pints @ 60¢ = \$75.00.
12. 125 articles @ 40¢ = \$50.00.
13. 48 ounces @  $16\frac{2}{3}$ ¢ = \$8.00.
14. 120 yards @ \$1.25 = \$150.00.
15. 330 pounds @  $33\frac{1}{3}$ ¢ = \$110.00.
16. 320 dozen @  $87\frac{1}{2}$ ¢ = \$280.00.
17. 120 gallons @ 50¢ = \$60.00.
18. 75 yards @ 56¢ = \$42.00.
19. 125 feet @ 80¢ = \$100.00.
20. 56 dozen @ \$1.25 = \$70.00.
21. 120 items @ 75¢ = \$90.00.
22. 660 yards @  $\$.66\frac{2}{3}$  = \$440.00.
23. 240 pounds @  $87\frac{1}{2}$ ¢ = \$210.00.
24. 96 feet @ 25¢ = \$24.00.
25. 72 dozen @ \$1.25 = \$90.00.
26. 48 items @  $\$.66\frac{2}{3}$  = \$32.00.
27. 175 articles @ 32¢ = \$56.00.
28. 640 dozen @ \$1.25 = \$800.00.
29. 360 items @ 75¢ = \$270.00.
30. 48 boxes @ \$2.50 = \$120.00.
31. 125 ounces @ \$.16 = \$20.00.
32. 72 feet @  $\$.37\frac{1}{2}$  = \$27.00.
33. 630 items @  $\$.66\frac{2}{3}$  = \$420.00.
34. 1,240 dozen @ \$1.50 = \$1,860.00.



## Appendices

Appendix B.  
Drills 50-52.

516

## Drill 50.

1. 240 items @  $33\frac{1}{3}\text{¢} = \$80.00$ .
2. 25 meters @  $\$2.48 = \$62.00$ .
3. 55 centimeters @  $40\text{¢} = \$22.00$ .
4. 64 units @  $37\frac{1}{2}\text{¢} = \$24.00$ .
5. 128 liters @  $50\text{¢} = \$64.00$ .
6. 84 kilograms @  $75\text{¢} = \$63.00$ .
7. 72 grams @  $12\frac{1}{2}\text{¢} = \$9.00$ .
8. 65 dozen @  $60\text{¢} = \$39.00$ .
9. 36 milliliters @  $16\frac{2}{3}\text{¢} = \$6.00$ .
10. 20 meters @  $\$1.55 = \$31.00$ .
11. 100 g @  $50\text{¢} = \$50.00$ .
12. 240 m @  $25\text{¢} = \$60.00$ .
13. 160 L @  $2\text{¢} = \$100.00$ .
14. 12 kg @  $83\frac{1}{3}\text{¢} = \$10.00$ .
15.  $99\text{m}^2$  @  $\$.66\frac{2}{3} = \$66.00$ .
16. 80 g @  $15\text{¢} = \$12.00$ .
17. 15.6 mL @  $33\frac{1}{3}\text{¢} = \$5.20$ .
18. 87.5 cm @  $16\text{¢} = \$14.00$ .
19. 30.25 L @  $20\text{¢} = \$6.05$ .
20. 6.5 L @  $60\text{¢} = \$3.90$ .

## Drill 51.

1. 360 pounds @  $16\frac{2}{3}\text{¢} = \$60.00$ .
2. 32 quarts @  $62\frac{1}{2}\text{¢} = \$20.00$ .
3. 25 pounds @  $9\frac{1}{2}\text{¢} = \$24.00$ .
4. 20 yards @  $\$.65 = \$13.00$ .
5. 120 items @  $\$.12\frac{1}{2} = \$15.00$ .
6. 180 feet @  $50\text{¢} = \$90.00$ .
7. 72 yards @  $\$1.12\frac{1}{2} = \$81.00$ .
8. 56 quarts @  $37\frac{1}{2}\text{¢} = \$21.00$ .
9. 75 pounds @  $88\text{¢} = \$66.00$ .
10. 160 ounces @  $\$.87\frac{1}{2} = \$140.00$ .
11.  $62\frac{1}{2}$  pounds @  $\$.64 = \$40.00$ .
12. 80 feet @  $35\text{¢} = \$28.00$ .
13. 120 gallons @  $33\frac{1}{3}\text{¢} = \$40.00$ .
14. 140 bushels @  $\$2.50 = \$350.00$ .
15. 50 pints @  $36\text{¢} = \$18.00$ .
16. 160 quarts @  $25\text{¢} = \$40.00$ .
17. 600 gallons @  $\$.66\frac{2}{3} = \$400.00$ .
18. 250 yards @  $\$1.50 = \$375.00$ .
19.  $37\frac{1}{2}$  pounds @  $64\text{¢} = \$24.00$ .
20. 40 feet @  $\$.65 = \$26.00$ .

## Drill 52.

1. 72 meters @  $25\text{¢} = \$18.00$ .
2. 480 centimeters @  $16\frac{2}{3}\text{¢} = \$80.00$ .
3. 36 liters @  $\$1.25 = \$45.00$ .
4. 60 grams @  $33\frac{1}{3}\text{¢} = \$20.00$ .
5. 20 square meters @  $\$1.55 = \$31.00$ .
6. 0.5 kilograms @  $\$3.20 = \$1.60$ .
7. 48 millimeters @  $75\text{¢} = \$36.00$ .
8. 240 liters @  $66\frac{2}{3}\text{¢} = \$160.00$ .
9. 12.5 grams @  $16\text{¢} = \$2.00$ .
10. 66 milliliters @  $83\frac{1}{3}\text{¢} = \$55.00$ .
11. 60 cm @  $45\text{¢} = \$27.00$ .
12. 96 L @  $37\frac{1}{2}\text{¢} = \$36.00$ .
13. 26 g @  $50\text{¢} = \$13.00$ .
14. 750 t @  $\$12 = \$9000.00$ .
15. 48 m @  $\$.62\frac{1}{2} = \$30.00$ .
16. 25 mL @  $12\text{¢} = \$3.00$ .
17. 88 kg @  $\$.87\frac{1}{2} = \$77.00$ .
18.  $150\text{cm}^2$  @  $44\text{¢} = \$66.00$ .
19.  $2.5\text{m}^2$  @  $80\text{¢} = \$2.00$ .
20. 175 mm @  $4\text{¢} = \$7.00$ .



Appendix B.  
Drills 53-54

Appendices

517

1.  $\$350.00 \times 6\% (\$21.00)$  for 6 days = \$.35.
2.  $\$1,300.00 \times 6\% (\$78.00)$  for 18 days = \$3.90.
3.  $\$200.00 \times 6\% (\$12.00)$  for 48 days = \$1.60.
4.  $\$220.00 \times 6\% (\$13.20)$  for 12 days = \$.44.
5.  $\$500.00 \times 6\% (\$30.00)$  for 42 days = \$3.50.
6.  $\$800.00 \times 6\% (\$48.00)$  for 24 days = \$3.20.
7.  $\$300.00 \times 6\% (\$18.00)$  for 54 days = \$2.70.
8.  $\$400.00 \times 6\% (\$24.00)$  for 18 days = \$1.20.
9.  $\$310.00 \times 6\% (\$18.60)$  for 120 days = \$6.20.
10.  $\$200.00 \times 6\% (\$12.00)$  for 180 days = \$6.00.
11.  $\$150.00 \times 6\% (\$9.00)$  for 240 days = \$6.00.
12.  $\$105.00 \times 6\% (\$6.30)$  for 540 days = \$9.45.
13.  $\$100.00 \times 6\% (\$6.00)$  for 120 days = \$2.00.
14.  $\$41.00 \times 6\% (\$2.46)$  for 1,200 days = \$8.20.
15.  $\$37.00 \times 6\% (\$2.22)$  for 1,800 days = \$11.10.

1.  $\$1,500.00 \times 6\% (\$90.00)$  for 2 days = \$.50.
2.  $\$1,800.00 \times 6\% (\$108.00)$  for 1 day = \$.30.
3.  $\$2,800.00 \times 6\% (\$168.00)$  for 3 days = \$1.40.
4.  $\$390.00 \times 6\% (\$23.40)$  for 20 days = \$1.30.
5.  $\$420.00 \times 6\% (\$25.20)$  for 30 days = \$21.00.
6.  $\$720.00 \times 6\% (\$43.20)$  for 10 days = \$1.20.
7.  $\$840.00 \times 6\% (\$50.40)$  for 15 days = \$2.10.
8.  $\$525.00 \times 6\% (\$31.50)$  for 12 days = \$1.05.
9.  $\$240.00 \times 6\% (\$14.40)$  for 45 days = \$1.80.
10.  $\$270.00 \times 6\% (\$16.20)$  for 40 days = \$1.80.
11.  $\$620.00 \times 6\% (\$37.20)$  for 300 days = \$31.00.
12.  $\$390.00 \times 6\% (\$23.40)$  for 200 days = \$13.00.



Appendixes.

Appendix B.

Drills 54-56.

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Drill 54  
(continued).

13.  $\$210.00 \times 6\%$  ( $\$12.60$ ) for 400 days =  $\$14.00$ .
14.  $\$320.00 \times 6\%$  ( $\$19.20$ ) for 150 days =  $\$8.00$ .
15.  $\$480.00 \times 6\%$  ( $\$28.80$ ) for 100 days =  $\$8.00$ .
16.  $\$1,220.00 \times 6\%$  ( $\$73.20$ ) for 30 days =  $\$6.10$ .
17.  $\$2,760.00 \times 6\%$  ( $\$165.60$ ) for 2 days =  $\$.92$ .
18.  $\$160.00 \times 6\%$  ( $\$9.60$ ) for 150 days =  $\$4.00$ .

Drill 55.

1.  $\$160.00 \times 6\%$  ( $\$9.60$ ) for 9 days =  $\$.24$ .
2.  $\$210.00 \times 6\%$  ( $\$12.60$ ) for 8 days =  $\$.28$ .
3.  $\$720.00 \times 6\%$  ( $\$43.20$ ) for 7 days =  $\$.84$ .
4.  $\$1,400.00 \times 6\%$  ( $\$84.00$ ) for 9 days =  $\$2.10$ .
5.  $\$660.00 \times 6\%$  ( $\$39.60$ ) for 7 days =  $\$.77$ .
6.  $\$2,700.00 \times 6\%$  ( $\$162.00$ ) for 8 days =  $\$3.60$ .
7.  $\$400.00 \times 6\%$  ( $\$24.00$ ) for 90 days =  $\$6.00$ .
8.  $\$150.00 \times 6\%$  ( $\$9.60$ ) for 75 days =  $\$2.00$ .
9.  $\$360.00 \times 6\%$  ( $\$21.60$ ) for 80 days =  $\$4.80$ .
10.  $\$180.00 \times 6\%$  ( $\$10.80$ ) for 70 days =  $\$2.10$ .
11.  $\$250.00 \times 6\%$  ( $\$15.00$ ) for 72 days =  $\$3.00$ .
12.  $\$500.00 \times 6\%$  ( $\$30.00$ ) for 66 days =  $\$5.50$ .
13.  $\$270.00 \times 6\%$  ( $\$16.20$ ) for 80 days =  $\$3.60$ .
14.  $\$360.00 \times 6\%$  ( $\$21.60$ ) for 66 days =  $\$3.96$ .
15.  $\$800.00 \times 6\%$  ( $\$48.00$ ) for 90 days =  $\$12.00$ .
16.  $\$250.00 \times 6\%$  ( $\$15.00$ ) for 90 days =  $\$3.75$ .
17.  $\$65.00 \times 6\%$  ( $\$3.90$ ) for 72 days =  $\$.78$ .
18.  $\$42.00 \times 6\%$  ( $\$2.52$ ) for 70 days =  $\$.49$ .

Drill 56.

1.  $\$60.00 \times 6\%$  ( $\$3.60$ ) for 21 days =  $\$.21$ .
2.  $\$600.00 \times 6\%$  ( $\$36.00$ ) for 19 days =  $\$1.90$ .
3.  $\$60.00 \times 6\%$  ( $\$3.60$ ) for 46 days =  $\$.46$ .
4.  $\$30.00 \times 6\%$  ( $\$1.80$ ) for 46 days =  $\$.23$ .
5.  $\$15.00 \times 6\%$  ( $\$.90$ ) for 160 days =  $\$.40$ .
6.  $\$75.00 \times 6\%$  ( $\$4.50$ ) for 160 days =  $\$2.00$ .



7.  $\$360.00 \times 6\% (\$21.60)$  for 41 days =  $\$2.46$ .
8.  $\$240.00 \times 6\% (\$14.40)$  for 17 days =  $\$.68$ .
9.  $\$480.00 \times 6\% (\$28.80)$  for 23 days =  $\$1.84$ .
10.  $\$180.00 \times 6\% (\$10.80)$  for 34 days =  $\$1.02$ .
11.  $\$540.00 \times 6\% (\$32.40)$  for 16 days =  $\$1.44$ .
12.  $\$600.00 \times 6\% (\$36.00)$  for 34 days =  $\$3.40$ .
13.  $\$150.00 \times 6\% (\$9.00)$  for 56 days =  $\$1.40$ .
14.  $\$1,200.00 \times 6\% (\$72.00)$  for 51 days =  $\$10.20$ .
15.  $\$3,600.00 \times 6\% (\$216.00)$  for 14 days =  $\$8.40$ .
16.  $\$2,400.00 \times 6\% (\$144.00)$  for 43 days =  $\$17.20$ .
17.  $\$6,000.00 \times 6\% (\$360.00)$  for 69 days =  $\$69.00$ .
18.  $\$1,500.00 \times 6\% (\$90.00)$  for 64 days =  $\$16.00$ .

1.  $\$800.00 \times 1\frac{1}{2}\% (\$12.00)$  for 60 days =  $\$2.00$ .
2.  $\$1,000.00 \times 4\frac{1}{2}\% (\$45.00)$  for 2 months =  $\$7.50$ .
3.  $\$180.00 \times 5\% (\$9.00)$  for 60 days =  $\$1.50$ .
4.  $\$240.00 \times 4\% (\$9.60)$  for 30 days =  $\$.80$ .
5.  $\$3,600.00 \times 1\% (\$36.00)$  for 30 days =  $\$3.00$ .
6.  $\$360.00 \times 2\% (\$7.20)$  for 60 days =  $\$1.20$ .
7.  $\$600.00 \times 3\% (\$18.00)$  for 30 days =  $\$1.50$ .
8.  $\$2,400.00 \times 8\% (\$192.00)$  for 60 days =  $\$32.00$ .
9.  $\$500.00 \times 9\% (\$45.00)$  for 60 days =  $\$7.50$ .
10.  $\$1,200.00 \times 7\frac{1}{2}\% (\$90.00)$  for 2 months =  $\$15.00$ .
11.  $\$3,000.00 \times 10\% (\$300.00)$  for 2 months =  $\$50.00$ .
12.  $\$3,600.00 \times 7\% (\$252.00)$  for 30 days =  $\$21.00$ .
13.  $\$800.00 \times 9\% (\$72.00)$  for 30 days =  $\$6.00$ .
14.  $\$900.00 \times 8\% (\$72.00)$  for 20 days =  $\$4.00$ .
15.  $\$1,500.00 \times 12\% (\$180.00)$  for 20 days =  $\$10.00$ .
16.  $\$1,600.00 \times 9\% (\$144.00)$  for 15 days =  $\$6.00$ .

Appendix

Appendix B.  
Drills 57-58.

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Drill 57  
(continued).

17.  $\$1,800.00 \times 5\% (\$90.00)$  for 6 days =  $\$1.50$ .
18.  $\$1,600.00 \times 9\% (\$144.00)$  for 75 days =  $\$30.00$ .
19.  $\$1,000.00 \times 8\% (\$80.00)$  for 90 days =  $\$20.00$ .
20.  $\$900.00 \times 10\% (\$90.00)$  for 120 days =  $\$30.00$ .

Drill 58.

1.  $\$800.00 \times 6\% (\$48.00)$  for 15 days =  $\$2.00$ .
2.  $\$1,500.00 \times 5\% (\$90.00)$  for 120 days =  $\$30.00$ .
3.  $\$500.00 \times 6\% (\$30.00)$  for 6 days =  $\$.50$ .
4.  $\$840.00 \times 2\% (\$16.80)$  for 60 days =  $\$2.80$ .
5.  $\$800.00 \times 3\% (\$24.00)$  for 2 months =  $\$4.00$ .
6.  $\$900.00 \times 5\% (\$45.00)$  for 30 days =  $\$2.40$ .
7.  $\$578.90 \times 6\% (\$34.73)$  for 6 days =  $\$.58$ .
8.  $\$200.00 \times 8\% (\$16.00)$  for 60 days =  $\$36.00$ .
9.  $\$300.00 \times 5\% (\$18.00)$  for 58 days =  $\$2.90$ .
10.  $\$1,700.00 \times 5\% (\$85.00)$  for 1 year =  $\$85.00$ .
11.  $\$5,000.00 \times 6\% (\$336.00)$  for 30 days =  $\$28.00$ .
12.  $\$600.00 \times 6\% (\$36.00)$  for 126 days =  $\$12.60$ .
13.  $\$1,200.00 \times 2\% (\$24.00)$  for 90 days =  $\$6.00$ .
14.  $\$500.00 \times 6\% (\$30.00)$  for 4 months =  $\$10.00$ .
15.  $\$950.00 \times 6\% (\$57.00)$  for 12 days =  $\$1.90$ .
16.  $\$950.00 \times 3\% (\$28.50)$  for 60 days =  $\$4.75$ .
17.  $\$1,600.00 \times 4\frac{1}{2}\% (\$72.00)$  for 15 days =  $\$3.00$ .
18.  $\$1,000.00 \times 6\% (\$60.00)$  for 120 days =  $\$20.00$ .
19.  $\$60.00 \times 6\% (\$3.60)$  for 113 days =  $\$1.13$ .
20.  $\$600.00 \times 6\% (\$36.00)$  for 178 days =  $\$17.80$ .
21.  $\$800.00 \times 9\% (\$72.00)$  for 60 days =  $\$12.00$ .
22.  $\$1,500.00 \times 2\% (\$30.00)$  for 60 days =  $\$5.00$ .
23.  $\$900.00 \times 10\% (\$90.00)$  for 60 days =  $\$15.00$ .
24.  $\$1,200.00 \times 7\% (\$84.00)$  for 90 days =  $\$21.00$ .



# Appendix B-C.

Drill 58 (for Appendix B),  
and Exercises 1 (for Sections 1-3 of Appendix C).

Appendix

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25.  $\$500.00 \times 6\% (\$30.00)$  for 15 days =  $\$1.25$ .
26.  $\$4,000.00 \times 7\frac{1}{2}\% (\$300.00)$  for 30 days =  $\$25.00$ .
27.  $\$3,000.00 \times 6\% (\$180.00)$  for 4 months =  $\$60.00$ .
28.  $\$600.00 \times 6\% (\$36.00)$  for 19 days =  $\$1.90$ .
29.  $\$240.00 \times 6\% (\$14.40)$  for 18 days =  $\$.72$ .
30.  $\$1,000.00 \times 12\% (\$120.00)$  for 2 months =  $\$20.00$ .
31.  $\$60.00 \times 6\% (\$3.60)$  for 470 days =  $\$4.70$ .
32.  $\$3,600.00 \times 7\% (\$252.00)$  for 60 days =  $\$42.00$ .
33.  $\$80.00 \times 3\% (\$2.40)$  for 75 days =  $\$.50$ .
34.  $\$240.00 \times 9\% (\$21.60)$  for 3 months =  $\$5.40$ .
35.  $\$750.00 \times 2\% (\$15.00)$  for 1 year =  $\$15.00$ .
36.  $\$2,400.00 \times 5\% (\$120.00)$  for 30 days =  $\$10.00$ .
37.  $\$900.00 \times 8\% (\$72.00)$  for 1 year =  $\$72.00$ .
38.  $\$1,000.00 \times 4\frac{1}{2}\% (\$45.00)$  for 60 days =  $\$7.50$ .
39.  $\$600.00 \times 6\% (\$36.00)$  for 26 days =  $\$2.60$ .
40.  $\$750.00 \times 2\% (\$15.00)$  for 30 days =  $\$1.25$ .
41.  $\$2,000.00 \times 9\% (\$180.00)$  for 15 days =  $\$7.50$ .
42.  $\$800.00 \times 3\% (\$24.00)$  for 4 months =  $\$8.00$ .
43.  $\$400.00 \times 3\% (\$12.00)$  for 90 days =  $\$3.00$ .
44.  $\$60.00 \times 6\% (\$3.60)$  for 129 days =  $\$1.29$ .
45.  $\$1,000.00 \times 11\% (\$110.00)$  for 1 year =  $\$110.00$ .
46.  $\$486.00 \times 6\% (\$29.16)$  for 30 days =  $\$2.43$ .
47.  $\$1,500.00 \times 4\% (\$60.00)$  for 1 year =  $\$60.00$ .
48.  $\$800.00 \times 4\frac{1}{2}\% (\$36.00)$  for 90 days =  $\$9.00$ .

## Appendix C.

$$\begin{aligned}
 & \$9.22 + \$3.44 + \$18.50 + \$5.96 = \$37.12; \\
 & 4 \times \$.15 = \$.60; \$37.12 + \$.60 = \$37.72; \\
 & \$92.60 + \$45.20 = \$137.80; \\
 & \$137.80 - \$37.72 = \$100.08.
 \end{aligned}$$

Appendices

Appendix C.  
Sections 1-3.  
Exercises 2-6.

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Sections 1-3  
(continued).

$$2. \$38.48 + \$73.00 + \$148.40 + \$201.10 + \$307.17 = \$768.15;$$

$$\$3,897.50 - \$768.15 = \$3,129.35.$$

$$3. \$1,985.76 - \$305.25 = \$1,680.51;$$

$$\$1,680.51 + \$138.95 = \$1,819.46.$$

4.

Holly Slate Reconciliation Statement April 30, 1981	
Checkbook balance: \$345.65	Bank statement balance: \$344.25
Less:	Less outstanding checks:
Service charge: 1.95	#652 \$ 24.15
	#653 38.90
	#654 46.51
	#655 56.00
	160.55
Correct checkbook balance: \$343.70	Available bank balance: \$343.70

$$5. a. \$28.50 + \$212.75 + \$79.25 = \$320.50.$$

$$b. \$1,440.38 + \$110.40 = \$1,550.78 \text{ (checkbook);}$$

$$\$1,871.28 - \$320.50 = \$1,550.78 \text{ (bank statement).}$$

6.

Paul Henderson Reconciliation Statement January 31, 1981	
Checkbook balance: \$1,319.05	Bank statement balance: \$1,165.75
Less:	Less outstanding checks:
Amount of check	#552 \$ 16.60
not recorded 57.10	#553 23.10
	#554 34.60
	74.30
	Sub-total: \$ 1,091.45
	Add: Deposit not recorded 170.50
Correct checkbook balance: \$1,261.95	Available bank balance: \$1,261.95



7. Kathy Selma  
Reconciliation Statement  
July 1, 1981

Checkbook balance: \$356.34	Bank statement balance: \$390.75
Less:	Less outstanding checks:
Service charge 1.15	#297 \$10.30
	#298 30.26
	#299 20.00
	<u>60.56</u>
	Sub-total \$330.19
	Add: Deposit not recorded 25.00
Correct checkbook balance: \$355.19	Available bank balance: \$355.19

8. Tom Frasier  
Reconciliation Statement  
August 31, 1981

Checkbook balance: \$151.37	Bank statement balance: \$307.98
Less:	Less outstanding checks:
Service charge 1.32	#490 \$28.54
Sub-total \$150.05	#491 19.29
Add: Amount on checkbook stub (too large) 9.00	#492 101.10
	<u>148.93</u>
Correct checkbook balance: \$159.05	Available bank balance: \$159.05

Wilma Butler  
Reconciliation Statement  
October 13, 1981

Checkbook balance: \$211.72	Bank statement balance: \$349.82
Less: Service charge 2.25	Less outstanding checks:
Sub-total: \$209.47	#167 \$50.80
Add: Deposit not recorded 50.00	#168 21.15
	#169 18.40
	<u>90.35</u>
Correct checkbook balance: \$259.47	Available bank balance: \$259.47

Appendices.

Appendix C.

Sections 1-3, 4-6.

Exercises 10-11 (for Sections 1-3),  
and Exercises 1-4 (for Sections 4-6).

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Exercises 1-3  
(continued).

10.

Donald Dawson Reconciliation Statement June 1, 1981	
Checkbook balance: \$575.00	Bank statement balance: \$620.30
Less:	Less outstanding checks:
Service charge 3.00	#324 \$ 63.80
Deposit recorded twice	#325 49.00
in checkbook 64.50	<u>112.80</u>
<u>67.50</u>	
Correct checkbook balance: \$507.50	Available bank balance: \$507.50

11.

Georgia Rosa Reconciliation Statement July 31, 1981	
Checkbook balance: \$1,218.26	Bank statement balance: \$1,048.83
Less:	Less outstanding checks:
Service charge 2.80	#412 \$ 75.91
Check not recorded 12.00	#413 102.16
<u>14.80</u>	#414 17.30
	<u>195.37</u>
	Sub-total: \$ 903.46
	Add: Deposit not recorded 300.00
Correct checkbook balance: \$1,203.46	Available bank balance: \$1,203.46

Section 4-6. 1.  $1.98 + 1.82 + 2.08 + 1.87 + 1.90 = 9.65$ ;  
 $9.65 \div 5 = 1.93$ .

2.  $\$.50 \times 109 = \$54.50$ .

3.  $\$.900 \div \$.40 = 22.5$  kilograms.

4.  $10 \text{ inches} \times 25.4 \text{ millimeters} = 254 \text{ millimeters}$ .



## Appendix C.

## Appendixes.

Sections 4-6, 7-12.

Exercises 5-9 (for sections 4-6),  
and Exercises 1-6 (for sections 7-12),

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$$5. 1.06 \text{ quarts} \times 500 \text{ liters} = 530 \text{ liters.}$$

$$6. 7.5 \text{ m} + 1.25 \text{ m} + 0.75 \text{ m} + 9.35 \text{ m} = 18.85 \text{ m};$$

$$18.85 \text{ m} \times \$2.00 = \$37.70.$$

$$7. 30.48 \text{ m} \div 3 = 10.16 \text{ m.}$$

$$8. 160 \text{ grams} \times 25 = 4000 \text{ grams} = 4 \text{ kilograms.}$$

$$9. a. 30 \text{ cm} \times 30 \text{ cm} = 900 \text{ cm}^2 = .09 \text{ m}^2;$$

$$.09 \text{ m}^2 \times 45 = 4.05 \text{ m}^2;$$

$$b. \$24.30 \div 4.05 \text{ m}^2 = \$6.00.$$

$$1. \$79.95 \times 4\% = \$3.20; \$79.95 \times 3\% = \$2.40;$$

$$\$79.95 + \$3.20 + \$2.40 = \$85.55.$$

$$2. \$2,880.00 \div 12 = \$240.00.$$

$$3. \$296.40 \div 38 = \$7.80.$$

$$4. \$1,228 + \$1,875 + \$1,290 + \$1,329 = \$5,722;$$

$$9 \times \$1,138 = \$10,242; \$10,242 + \$5,722 = \$15,964;$$

$$\$15,964 \div 13 = \$1,228.$$

$$5. \$246 + \$288 + \$234 + \$276 = \$1,044;$$

$$\$255 \times 5 = \$1,275; \$1,275 - \$1,044 = \$231.$$

$$6. \text{Eatmore meat: } \$1.20 \div 10 = \$ .12; (16 \times \$ .12 = \$1.92)$$

$$\text{Payless meat: } \$1.75 \div 14 = \$ .125. (16 \times \$ .125 = \$2.00)$$

$$\text{Eatmore meat is cheaper; } \$2.00 - \$1.92 = \$ .08.$$

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Sections 13-15

$$1. 4\frac{1}{4} + 7\frac{3}{8} + 12\frac{1}{2} + 11\frac{2}{3} + 8\frac{5}{6}$$

$$= 4\frac{6}{24} + 7\frac{9}{24} + 12\frac{12}{24} + 11\frac{16}{24} + 8\frac{20}{24} = 42\frac{63}{24} = 44\frac{5}{8}$$

$$2. 38\frac{1}{8} + 50\frac{1}{4} = 38\frac{1}{8} + 50\frac{2}{8} = 88\frac{3}{8}$$

$$145 - 88\frac{3}{8} = 56\frac{5}{8}$$

$$3. 5\frac{1}{4} + 3\frac{1}{6} + 7\frac{2}{3} + 4\frac{1}{2} = 5\frac{3}{12} + 3\frac{2}{12} + 7\frac{8}{12} + 4\frac{6}{12} = 19\frac{19}{12}$$

$$= 20\frac{7}{12}; 27 - 20\frac{7}{12} = 6\frac{5}{12}$$

$$4. 58\frac{1}{2} - 47\frac{1}{2} = 58\frac{2}{10} - 47\frac{5}{10} = 10\frac{7}{10}$$

$$5. \$7.80 \times 23\frac{1}{2} = \$183.30$$

$$6. \$20.00 \times 4\frac{1}{2} = \$90.00$$

Qty.	Description	Price	Ext. price
$1\frac{1}{2}$ doz.	Handkerchiefs	\$9.69	\$12.92
$\frac{1}{4}$ doz.	Towels	18.80	4.70
$\frac{3}{4}$ doz.	Washcloths	6.35	4.76
1 pair	Socks	1.69	+ 1.69
			\$24.07

$$\$50.00 - \$24.07 = \$25.93$$

$$8. 32\frac{1}{2} \div 2\frac{1}{2} = \frac{65}{2} \times \frac{2}{5} = 13$$

$$9. 65 \div 3\frac{1}{4} = \frac{65}{1} \times \frac{4}{13} = 20$$



## Appendix C.

Appendixes.

Sections 16-20, 21-24.

Exercises 1-6 (for Sections 16-20),  
and Exercises 1-3 (for Sections 21-24).

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1.  $\$6.00 \times 40 = \$240.00;$

$\$6.00 \times 1.5 = \$9.00;$

$\$9.00 \times 10 = \$90.00;$

$\$240.00 + \$90.00 = \$330.00;$

$\$20.23 + \$49.50 + \$15.75 + \$2.00 + \$3.00 = \$90.48;$

$\$330.00 - \$90.48 = \$239.52.$

2.  $60 \times \$ .50 = \$30.00; 15 \times \$ .60 = \$9.00;$

$11 \times \$ .70 = \$7.70; \$30.00 + \$9.00 + \$7.70 = \$46.70.$

3.  $\$5.04 \times 40 = \$201.60; \$201.60 \div 36 = \$5.60.$

4.  $\$300.00 \times 6.13\% = \$18.39.$

5. Doone:  $\$223.20$  (wages),  $\$13.68$  (FICA tax withheld).

Fero:  $\$223.50$  (wages),  $\$13.70$  (FICA tax withheld).

Grimm:  $\$234.00$  (wages),  $\$14.34$  (FICA tax withheld).

5. a.  $\$21.50.$  b.  $\$220.00 - \$23.10 = \$196.90.$

c.  $\$237.50 - \$17.10 = \$220.40.$

1.  $24 \times \$ .50 = \$12.00; \$32.00 - \$12.00 = \$20.00;$

$\$20.00 \div \$ .40 = 50.$

2.  $5\% \text{ of } \$620.40 = \$31.02;$

$8\% \text{ of } \$238.50 = \$19.08;$

$\$175.00 + \$31.02 + \$19.08 = \$225.10.$

3.  $\$3,200 - \$1,200 = \$2,000;$

$10\% \text{ of } \$2,000 = \$200;$

$\$180 + \$200 = \$380.$

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Sections 21-24  
(continued).

$$\begin{aligned} 4. & \$11,250 + \$8,250 + \$9,675 = \$29,175; \\ & \$8,000 \times 3 = \$24,000; \$29,175 - \$24,000 = \$5,175; \\ & 4\% \text{ of } \$5,175 = \$207; \$900 \times 3 = \$2,700; \\ & \$2,700 + \$207 = \$2,907. \end{aligned}$$

$$\begin{aligned} 5. & \$10,400 + \$9,850 = \$20,250; \\ & \$9,000 \times 2 = \$18,000; \$20,250 - \$18,000 = \$2,250; \\ & 3\% \text{ of } \$20,250 = \$607.50; 5\% \text{ of } \$2,250 = \$112.50; \\ & \$750.00 + \$607.50 + \$112.50 = \$1,470.00. \end{aligned}$$

$$\begin{aligned} 6. & \$1,000 \times 12 = \$12,000; \\ & \$23,640 - \$12,000 = \$11,640; \\ & \$11,640 \div \$194,000 = 6\%. \end{aligned}$$

$$7. \quad \$3,000 \div 40\% = \$7,500.$$

$$\begin{aligned} 8. & 6\% \text{ of } \$70,000 = \$4,200; \\ & 40\% \text{ of } \$4,200 = \$1,680. \end{aligned}$$

$$\begin{aligned} 9. & \$935.00 \times 70\% = \$654.50; \\ & \$654.50 \times 40\% = \$261.80; \\ & \$654.50 + \$261.80 = \$916.30. \end{aligned}$$

$$\begin{aligned} 10. & \$67,200 - \$60,000 = \$7,200; \\ & \$7,200 \div \$60,000 = 12\%. \end{aligned}$$

$$\begin{aligned} 11. & 100\% - 8\% = 92\%; \\ & 184 \div 92\% = 200. \end{aligned}$$



1. a. July 3 + 60 days = September 1.  
b.  $\$950.00 \times 9\% (\$85.50)$  for 60 days =  $\$14.25$ ;  
 $\$950.00 + \$14.25 = \$964.25$ .

2.  $\$3,000.00 \times 10\% (\$300.00)$  for 90 days =  $\$75.00$ ;  
 $\$3,000.00 + \$75.00 = \$3,075.00$ .

3. a.  $\$1,200 \times 12\% (\$144)$  for 3 months =  $\$48$ ;  
 $\$1,200 + \$48 = \$1,248$ .  
b. September 9 + 3 months = December 9.

4.  $18 \times \$8.25 = \$148.50$ ;  
 $\$148.50 - \$135.00 = \$13.50$ ;  
 $\$13.50 \div \$135.00 = 10\%$ .

5.  $30\%$  of  $\$249.00 = \$74.70$ ;  
 $\$249.00 - \$74.70 = \$174.30$ ;  
 $\$174.30 \div \$11.62 = 15$ .

6. a.  $\$450.00 - \$150.00 = \$300.00$ ;  
 $\$300.00 \div 20 = \$15.00$ .  
b.  $\$150.00 \div \$450.00 = 33\frac{1}{3}\%$ .

7.  $\$460.00 - 25\% (\$115.00) = \$345.00$ ;  
 $\$345.00 + 12\% (\$41.40) = \$386.40$ ;  
 $\$386.40 \div 24 = \$16.10$ .

8.  $\$590.00 - \$60.00 = \$530.00$ ;  
 $\$530.00 + 10\% (\$53.00) = \$583.00$ ;  
 $\$583.00 + \$17.00 = \$600.00$ ;  
 $\$600.00 \div 12 = \$50.00$ .

Sections 25-31, 32-38.

Exercises 9-11 (for Sections 25-31),  
and Exercises 1-4 (for Sections 32-38).

530

Sections 25-31  
(continued).

9.  $8 \times \$28.20 = \$225.60;$   
 $\$225.60 + \$65.40 = \$291.00;$   
 $\$291.00 - \$270.00 = \$21.00.$

10.  $\$150.00 \times 12 = \$1,800.00;$   
 $\$1,800.00 + \$900.00 = \$2,700.00;$   
 $\$2,500.00 - \$900.00 = \$1,600.00;$   
 $\$1,600.00 \times 9\% (\$144.00) = \$1,744.00;$   
 $\$1,744.00 + \$900.00 = \$2,644.00;$   
 $\$2,700.00 - \$2,644.00 = \$56.00.$

11.  $\$34.00 \times 12 = \$408.00;$   
 $\$408.00 - \$379.44 = \$28.56;$   
 $\$28.56 \div \$379.44 = 7.5\%.$

Sections 32-38.

1.  $\$10.50 \times 4 = \$42.00;$   
 $\$42.00 \div \$600.00 = 7\%.$

2. *An Account with Valerie Novak*

Date	Withdrawal	Deposit	Interest	Balance
<sup>1981</sup> Apr. 1		\$400.00	\$6.00	\$406.00
July 1			6.09	412.09
			6.18	418.27

6% interest a year

3.  $12 \times \$546.25 = \$6,555.00;$   
 $12 \times \$3.45 = \$41.40;$   
 $\$6,555.00 + \$41.40 = \$6,596.40.$

4.  $14 \times \$1,000.00 = \$14,000.00;$   
 $\$14,000.00 \times 8\frac{1}{2}\% = \$1,190.00;$   
 $\$1,190.00 \div 2 = \$595.00.$



5.  $20 \times \$58.75 = \$1,175.00;$   
 $\$1,175.00 + \$18.75 = \$1,193.75.$
6. a.  $\$38,400.00 + \$420.00 = \$38,820.00;$   
 $\$38,820.00 \div 1,200 = \$32.35.$   
b.  $\$.30 \times 4 = \$1.20;$   
 $\$1.20 \times 1,200 = \$1,440.00.$
7.  $\$42.40 + \$78.00 + \$22.00 + \$150.20 = \$292.60;$   
 $\$292.60 \div \$6,650.00 = 4.4\%.$
8.  $\$3.60 \times 65 = \$234.00;$   
 $\$2,616.25 - \$234.00 = \$2,382.25;$   
 $\$2,382.25 - \$2,348.65 = \$33.60 \text{ (net loss).}$
9.  $25 \times \$98.75 = \$2,468.75;$   
 $\$2,468.75 + \$19.35 = \$2,488.10.$   
 $25 \times \$101.50 = \$2,537.50;$   
 $\$2,537.50 + \$31.17 = \$2,568.67;$   
 $\$2,568.67 - \$2,488.10 = \$80.57.$
10.  $\$1,800.00 \div 8\% = \$22,500.$
11.  $\$60,000.00 - \$10,000.00 = \$50,000.00;$   
 $\$360.00 \times 24 = \$8,640.00;$   
 $\$400 + \$1,230 + \$1,860 + \$4,250 = \$7,740;$   
 $\$8,640.00 - \$7,740.00 = \$900.00;$   
 $\$900.00 \div \$10,000.00 = 9\%.$

Appendix C.  
Sections 39-45.  
Exercises 1-10.

532

Sections 39-45.

1.  $80\%$  of  $\$45,000 = \$36,000$ ;  
 $\$45,000 - \$36,000 = \$9,000$ .

2.  $30\%$  of  $\$29,500 = \$8,850$ ;  
 $\$8,850 + \$135 + \$45 + \$250 = \$9,280$ .

3.  $9\%$  of  $\$36,000 = \$3,240$ ;  $2\%$  of  $\$48,000 = \$960$ ;  
 $\$1,160 + \$300 + \$960 + \$600 = \$3,020$ ;  
 $\$3,240 + \$3,020 = \$6,260$ .

4.  $7\%$  of  $\$10,000 = \$700$ ;  
 $\$5,000 + \$700 = \$5,700$ ;  $\$5,700 \div 12 = \$475$ ;  
 $\$500 - \$475 = \$25$ .

5.  $\$8,000 \div \$1,000 = 8$ ;  
 $8 \times \$45.50 = \$364.00$ .

6.  $\$45,000 \div \$1,000 = 45$ ;  
 $45 \times \$59.42 = \$2,673.90$ ;  
 $50\%$  of  $\$2,673.90 = \$1,336.95$ .

7.  $75\%$  of  $\$60,000 = \$45,000$ ;  
 $\$45,000 \div 100 = \$450$ ;  $\$450 \times \$.70 = \$315$ .

8.  $\$24,000 + \$12,000 = \$36,000$ ;  
 $\$12,000 \div \$36,000 = 33\frac{1}{3}\%$ ;  $33\frac{1}{3}\%$  of  $\$4,800 = \$1,600$ .

9.  $40,026 - 39,842 = 184$ ;  
 $\$.085 \times 184 = \$15.64$ .

10.  $80\%$  of  $\$50,000 = \$40,000$ ;  
 $\$30,000 \div \$40,000 = .75$ ;  $75\%$  of  $\$12,000 = \$9,000$ .



Appendix C.  
Sections 46-49.  
Exercises 1-8.

Appendixes.

533

1.  $\$8,500.00 - \$900.00 = \$7,600.00;$   
 $\$7,600.00 \div 5 = \$1,520.00.$

2. a.  $\$4,500 - \$1,500 = \$3,000;$   
 $\$3,000 \div 3 = \$1,000.$   
b.  $\$5,400 - \$1,500 = \$3,900;$   
 $12 \times \$3,900 = \$46,800.$

3.  $18\% \text{ of } \$7,200 = \$1,296;$   
 $\$1,296 \div 12 = \$108.$

4.  $\$600 - \$270 = \$330;$   
 $\$330 \div 12 = \$27.50.$

5.  $20\% \text{ of } \$5,860 = \$1,172;$   
 $3 \times \$1,172 = \$3,516;$   
 $\$5,860 - \$3,516 = \$2,344.$

6. a.  $\$2,000 + \$1,600 + \$1,200 = \$4,800;$   
 $\$10,400 - \$4,800 = \$5,600.$   
b.  $\$4,800 + \$1,000 + \$1,000 = \$6,800;$   
 $\$6,800 \div 5 = \$1,360.$

7.  $4 \times \$94.04 = \$376.16;$   
 $\$610.20 - \$376.16 = \$234.04.$

8.  $\$180 \div \$1,200 = 15\%.$

Appendices.

## Appendix C.

Sections 46-49, 50-53.

Exercises 9-10 (for sections 46-49),  
and Exercises 1-6 (for sections 50-53).

534

Sections 46-49  
(continued).

9.  $\$564 + \$703 + \$38 + \$245 = \$1,600;$   
 $\$1,600.00 \div 12 = \$133.33.$

10.  $12,840 \div 20 = 642;$   
 $\$.80 \times 642 = \$513.60.$

Sections 50-53.

1.  $\$879,570 - \$26,445 = \$853,125;$   
 $\$853,125 \div \$18,750,000 = .0455;$   
 $\$100 \times .0455 = \$4.55.$

2. a.  $\$1,579,040 - \$540,000 = \$1,039,040;$   
 $\$1,039,040 \div \$32,000,000 = .03247;$   
 $\$1,000 \times .03247 = \$32.47.$   
b.  $60\% \text{ of } \$30,000 = \$18,000;$   
 $\$18,000 \times .03247 = \$584.46.$

3.  $\$405.96 \div \$6,800.00 = 0.0597;$   
 $0.0597 \times \$1,000 = \$59.70.$

4. Total sales, \$54.57.  
Sales tax, 7%  
Original marked price, \$51.00.

5. Total cost, \$412.00.  
Sales tax, 3%.  
Original retail price, \$400.00  
Amount of sales tax, \$12.00.

6. Total cost, \$77,868.00.  
Sales tax, 3%.  
Original retail price, \$75,600.00.  
Amount of sales tax, \$2,268.00.



# Appendix C.

# Appendixes

Sections 50-53, 54-57.

Exercises 7-8 (for sections 50-53),  
and Exercises 1-3 (for sections 54-57).

535

$$\begin{aligned} 7. \quad & \$43,882 - \$43,200 = \$682; \\ & 48\% \text{ of } \$682.00 = \$327.36; \\ & \$328 + \$12,140 = \$12,468. \end{aligned}$$

$$\begin{aligned} 8. \quad & \$2,250 + \$1,755 + \$215 + \$300 = \$4,520; \\ & \$19,350 - \$13,000 = \$6,350; \\ & 9\% \text{ of } \$6,350 = \$571.50; \\ & \$4,520.00 + \$571.50 = \$5,091.50. \end{aligned}$$

$$\begin{aligned} 1. \quad & 465 \times \$ .50 = \$232.50; \\ & 174 \times \$1.00 = \$174.00; \\ & \$232.50 + \$174.00 = \$406.50; \\ & \$60.00 + \$15.00 + \$7.50 = \$82.50; \\ & \$406.50 - \$82.50 = \$324.00. \end{aligned}$$

$$\begin{aligned} 2. \quad a. \quad & 40 \times \$6.40 = \$256.00; \\ & \$6.40 \times 1.5 = \$9.60; \quad 3 \times \$9.60 = \$28.80; \\ & \$256.00 + \$28.80 = \$284.80. \\ b. \quad & 40 \times \$5.00 = \$200.00; \\ & \$12.26 + \$19.00 + \$3.90 = \$35.16. \\ & \$200.00 - \$35.16 = \$164.84. \end{aligned}$$

$$\begin{aligned} 3. \quad a. \quad & \text{Groceries, } \$28,000. \\ b. \quad & \text{Baked Goods, } \$6,000. \\ c. \quad & \$24,000 \div 6 = \$4,000. \\ d. \quad & \$16,000 + 5\% (\$800) = \$16,800. \\ e. \quad & \$10,000 - 25\% (\$2,500) = \$7,500. \\ f. \quad & \$6,000 + \$28,000 + \$16,000 + \$10,000 \\ & + \$24,000 = \$84,000. \end{aligned}$$

Appendixes. Appendix C.  
Sections 54-57  
Exercises 4-9.

536

Sections 54-57  
(continued)

4. a. There were 25,000 bats made in 1970.  
b.  $60,000 - 55,000 = 5,000$ .  
c.  $85,000 \times \$3.00 = \$255,000$ .  
d.  $\$75,000 + 33\frac{1}{2}\%(\$25,000) = \$100,000$ .

5.  $197 \times \$1.50 = \$295.50$ ;  
 $344 \times 1.00 = + 344.00$   
 $\$639.50$

$\$50 + \$10 + \$35 = \$95$ ;  
 $\$639.50 - \$95.00 = \$544.50$

6. Employee	Salary	No. of hrs. wk.	Rate per hr.
T. Lopez	\$207.50	2	\$16.90
J. Frie	225.00	2	23.10
M. Watson	215.00	2	21.30

7. a. \$17,000 in 1980.  
b.  $\$17,000 + 20\%(\$3,400) = \$21,400$ .  
c.  $\$22,000 + \$23,000 + \$32,000$   
 $+ \$12,000 + \$17,000 = \$119,000$ .  
d.  $\$119,000 \div 5 = \$23,800$ .

8. a.  $40\%$  of  $\$240,000 = \$96,000$ .  
b.  $6\frac{2}{3}\%$  of  $\$240,000 = \$16,000$ .  
c.  $73\frac{1}{3}\%$  of  $\$240,000 = \$176,000$ .  
 $\$240,000 - \$176,000 = \$64,000$ .  
d.  $\$240,000 + 8\%(\$19,200) = \$259,200$ .

9.  $\$87.00 - \$17.00 = \$70.00$ ;  
 $\$200.00 - \$70.00 = \$130.00$ ;  
 $\$130.00 \div 52 = \$2.50$ .



Appendix C.  
Sections 54-57.  
Exercises 10-13.

Appendices

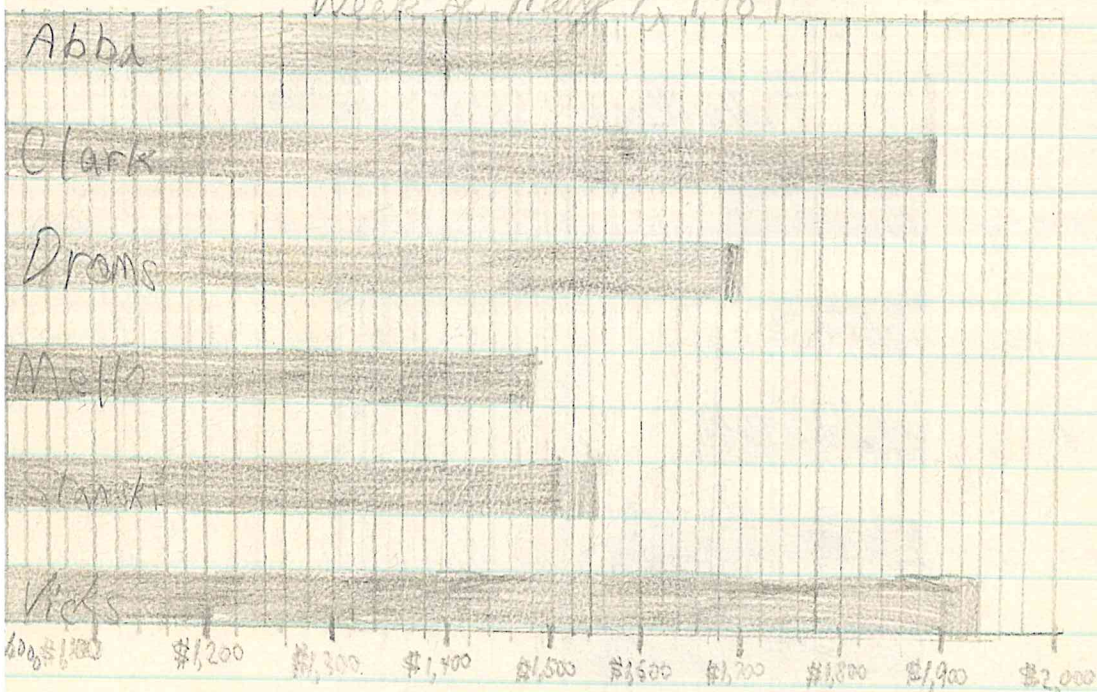
537

10.  $\$131,500 + \$21,270 = \$152,770$ ;  
 $\$152,770 - \$94,450 = \$58,320$ ;  
 $\$58,320 \div \$131,500 = 44.3\%$ .

11. a. 1979 (\$100,000).  
 b. 1980 (\$30,000).  
 c. 1980 (\$270,000).  
 d. 1979 (\$720,000).  
 e.  $\$30,000 \div \$600,000 = 5\%$ .

12.  $\$500.00 \times 6\frac{1}{2} = \$3,250.00$ .

13. a. Beach Product Co.  
 Sales Contest Results  
 Week of May 7, 1981



Appendixes.

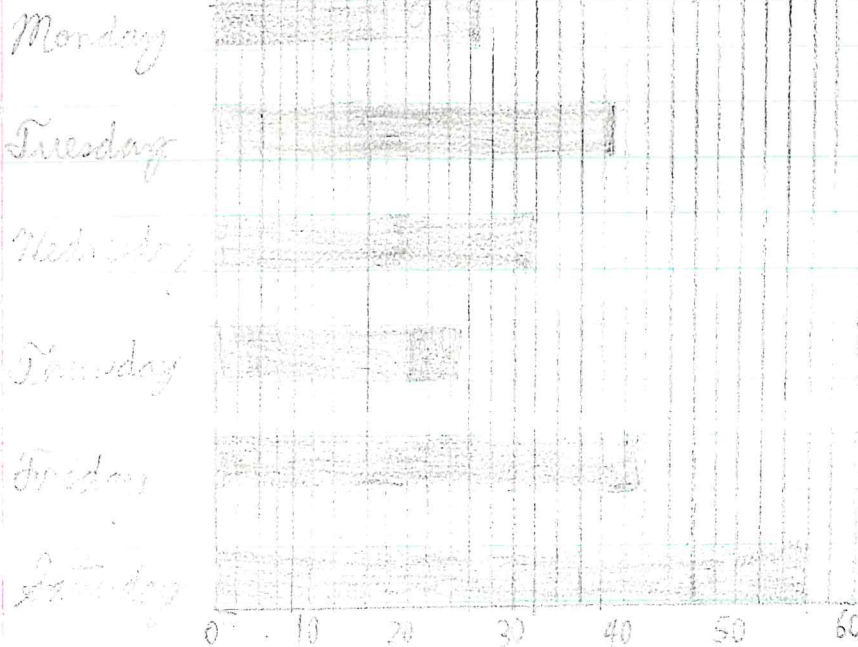
Appendix C  
Sections 54-57.  
Exercises 13-14.

538

Sections 54-57  
(continued)  
Exercise 13.  
(continued)

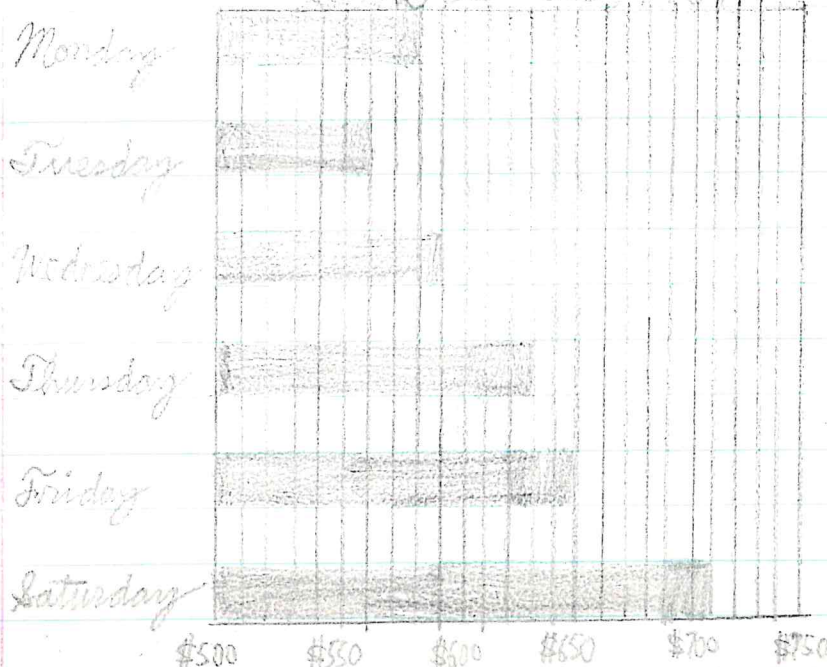
B.

Ann's Dress Shop  
Dresses Sold During the Week  
Ending March 22, 1981



14.

Daily Lunch Counter Sales  
Week 20-26, 1981





## Appendix C.

Appendix

Sections 54-57, 58-61.

Exercise 15 (for Sections 54-57),  
and Exercises 1-6 (for Sections 58-61).

539

15. Employee	Gross Earnings	FICA Tax Withheld
K. Hamid	\$202.95	\$12.44
G. Maguay	203.90	12.50
F. Prell	223.34	13.69
L. Jabek	234.95	14.40

$$1. \$165.00 - 20\% (\$33.00) = \$132.00;$$

$$\$132.00 - 10\% (\$13.20) = \$118.80.$$

$$2. \$360.00 - \$300.00 = \$60.00;$$

$$\$60.00 \div \$300.00 = 20\%.$$

$$3. \text{Mount Distributing Company: } \$620.00 - 35\% (\$217.00) = \$403.00.$$

$$\text{Westover Distributing Company: } \$580.00 - 20\% (\$116.00) = \$464.00;$$

$$\$464.00 - 15\% (\$69.60) = \$394.40;$$

$$\$394.40 + \$20.00 = \$414.00.$$

$\$414.00 - \$403.00 = \$11.00$ ; Mount Distributing Company has the better offer.

$$4. 100\% - 15\% = 85\%;$$

$$85\% - 8.5\% (10\% \text{ of } 85\%) = 76.5\%;$$

$$100\% - 76.5\% = 23.5\%.$$

$$5. \text{Merchandise A: } 100\% - 30\% = 70\%;$$

$$70\% - 14\% (20\% \text{ of } 70\%) = 56\%; 100\% - 56\% = 44\%.$$

$$\text{Merchandise B: } 100\% - 40\% = 60\%;$$

$$60\% - 6\% (10\% \text{ of } 60\%) = 54\%; 100\% - 54\% = 46\%.$$

$$46\% - 44\% = 2\%; \text{Merchandise B has better offer.}$$

$$6. \$8.90 - 10\% (\$.89) = \$8.01;$$

$$4 \times \$8.01 = \$32.04.$$

540

Sections 58-61  
(continued).

7. March 13 to April 5: 23 days;  
\$415.00 (Invoice would not be paid within 20 days).

8.  $2\%$  of  $\$2,600.00 = \$52.00$ ;  
 $12 \times \$52.00 = \$624.00$ .

9. Fairchild Company:  $\$700.00 - 10\% (\$70.00) = \$630.00$ ;  
 $\$630.00 - \$63.00 (10\% \text{ of } \$630.00) = \$567.00$ .

Janke Company:  $\$1,000.00 - 40\% (\$400.00) = \$600.00$ ;  
 $\$600.00 - 3\% (\$18.00) = \$582.00$ .

$\$582.00 - \$567.00 = \$15.00$ ; Fairchild Company has the better offer.

10. October 25 + 10 days = November 4.

11. a.  $\$36.20 - \$34.39 = \$1.81$ ;  
 $\$1.81 \div \$36.20 = 5\%$ .

b.  $\$12.80 - 5\% (\$.64) = \$12.16$ .

12.  $\$1,500.00 - 10\% (\$150.00) = \$1,350.00$ ;

$\$1,350.00 \times 10\% (\$135.00) \text{ for 60 days} = \$22.50$ ;

$\$150.00 - \$22.50 = \$127.50$ .

13.  $\$436.00 \times 9\% (\$39.24) \text{ for 60 days} = \$6.54$ ;  
 $\$16.25 - \$6.54 = \$9.71$ .

14.  $100\% - 2\% = 98\%$ ;  
 $\$19.50 \div 98\% = \$19.90$ .



541

1.  $\$300.00 \div 12 = \$25.00;$   
 $\$25.00 + 60\% (\$15.00) = \$40.00.$

2. a.  $\$8.00 \times 8 = \$64.00;$   
 $\$14.00 \times 8 = \$112.00; \$112.00 - \$64.00 = \$48.00;$   
 $\$48.00 \div \$64.00 = 75\%; 100\% - 75\% = 25\%.$   
b.  $\$14.00 - \$12.00 = \$2.00; 14.3\% \text{ markups}$   
 $\$180.00 - \$120.00 = \$68.00; 57.7\% \text{ markups}.$

3.  $\$3,865 + \$712 = \$4,577;$   
 $\$4,577 - \$4,392 = \$185 (\text{net loss}).$

4.  $\$70.00 - \$45.50 = \$24.50;$   
 $\$24.50 \div \$70.00 = 35\%.$

5. a.  $\$2.25 \times 12 = \$27.00;$   
 $\$18.00 \div \$27.00 = 66\frac{2}{3}\%;$   
 $100\% - 66\frac{2}{3}\% = 33\frac{1}{3}\%.$   
b.  $\$18.00 \times 12 = \$216.00;$   
 $\$2.25 \times 120 = \$270.00; \$216.00 \div \$270.00 = 80\%;$   
 $100\% - 80\% = 20\%.$

6.  $\$70.80 - \$60.00 = \$10.80;$   
 $\$10.80 \div \$60.00 = 18\%.$

7. BEAUTY SHOP  
1 2 3 4 5 6 7 8 9 0

a.  $\$3.35 = \text{AXT.}$  b.  $\text{ESOH} = \$27.98.$

8. MELODY HITS  
1 2 3 4 5 6 7 8 9 0

OMDS =  $\$41.50;$   
 $\$69.95 - \$41.50 = \$28.45; 40.7\% \text{ gross profit}.$

Appendices.

Appendix C.

Sections 62-66.

Exercises 9-14.

542

Sections 62-66  
(continued).

9.  $\$21.00 + 30\% (\$7.00) = \$28.00.$

10.  $\$450.00 - 20\% (\$90.00) = \$360.00;$   
 $\$360.00 - 10\% (\$36.00) = \$324.00;$   
 $\$324.00 + \$8.00 = \$332.00.$   
 $\$332.00 + 20\% (\$66.40) = \$398.40.$

11.  $\$300.00 - 25\% (\$75.00) = \$225.00;$   
 $\$225.00 - 10\% (\$22.50) = \$202.50;$   
 $\$202.50 + \$7.50 = \$210.00.$   
 $\$210.00 + 30\% (\$63.00) = \$273.00;$   
 $\$273.00 + 10\% (\$27.30) = \$300.30.$

12.  $325 \div 200 = 52\frac{1}{2}; 700 - 52\frac{1}{2} = 175;$   
 $700 \times \$16.50 = \$11,550;$   
 $325 \times \$29.50 = \$9,587.50;$   
 $200 \times \$24.50 = \$4,900.00;$   
 $175 \times \$19.50 = \$3,412.50.$   
 $\$9,587.50 + \$4,900.00 + \$3,412.50 = \$17,900.00.$   
 $\$17,900 - \$11,550 = \$6,350; \$6,350 \div \$11,550 = 55\%.$

13. a.  $\$34.80 - \$23.20 = \$11.60;$   
 $\$11.60 \div \$23.20 = 50\%.$   
 b.  $\$23.20 \div \$34.80 = 66\frac{2}{3}\%;$   
 $100\% - 66\frac{2}{3}\% = 33\frac{1}{3}\%.$

14.  $\$128.00 - 25\% (\$32.00) = \$96.00;$   
 $\$96.00 + \$9.00 = \$105.00;$   
 $\$105.00 + 40\% (\$42.00) = \$147.00.$



## Appendix C.

## Appendices

Sections 62-66, 67-70.

Exercises 15-19 (for Sections 62-66),  
and Exercises 1-3 (for Sections 67-70).

543

$$15. \$121.50 - \$97.20 = \$24.30;$$

$$\$24.30 \div \$121.50 = 20\%.$$

$$16. 30 \times 5 = 150; \$15.00 \times 150 = \$2,250.00;$$

$$\$2,250.00 + \$2.90 = \$2,252.90;$$

$$\$15.00 \times 5 = \$75.00; \$2,252.90 - \$75.00 = \$2,177.90;$$

$$\$2,177.90 + 30\% (\$653.37) = \$2,831.27;$$

$$\$2,831.27 \div 145 = \$19.53.$$

$$17. \$40.00 - \$32.00 = \$8.00;$$

$$\$8.00 \div \$32.00 = 25\%; \$40.00 - \$36.00 = \$4.00;$$

$$\$36.00 + 25\% (\$9.00) = \$45.00.$$

$$18. 600 \times \$12.50 = \$7,500.00;$$

$$300 \times \$21.95 = \$6,585.00; 300 \times \$13.95 = \$4,185.00;$$

$$\$6,585.00 + \$4,185.00 = \$10,770.00;$$

$$\$10,770.00 - \$2,557.50 = \$8,212.50;$$

$$\$8,212.50 - \$7,500.00 = \$712.50; \$712.50 \div \$7,500.00 = 9.5\%.$$

$$9. 225 \times \$6.00 = \$1,350.00;$$

$$150 \times \$9.00 = \$1,350.00; 225 - 150 = 75;$$

$$\$1,350.00 + 40\% (\$540.00) = \$1,890.00;$$

$$\$540.00 \div 75 = \$7.20.$$

$$1. \$1,200.00 \times 9\% (\$108.00) \text{ for 60 days} = \$18.00.$$

$$2. \$720.00 \times 10\% (\$72.00) \text{ for 30 days} = \$6.00.$$

$$3. \text{ June 2 to June 12: 10 days;}$$

$$\$300.00 \times 9\% (\$27.00) \text{ for 90 days} = \$3.00;$$

$$\$3.00 \div 10 = \$0.30; 8 \times \$0.30 = \$2.40;$$

$$\$300.00 - \$2.40 = \$297.60.$$

Appendix, Appendix C.  
Sections 67-70.  
Exercises 4-12.

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Sections 67-70  
(continued).

4. June 10 to July 21: 40 days;  
 $\$720.00 \times 8\% (\$57.60) \text{ for 40 days} = \$6.40$ ;  
 $\$720.00 + \$6.40 = \$726.40$ ;  
 $\$726.40 - 9\% (\$65.38) = \$661.02$ .

5. March 15 to April 14: 30 days;  
 $\$4,000 \times 10\% (\$400) \text{ for 30 days} = \$33.33$ ;  
 $\$4,000.00 - \$33.33 = \$3,966.67$ .

6.  $\$12,500 \div \$50,000 = 25\%$ .

$\$2,750.00 \times .56 = \$1,550.00$ .

7.  $\$24,000 \div \$36,000 = .66\frac{2}{3}$ ;  
 $66\frac{2}{3}\% \text{ of } \$1,800 = \$1,200$ .

9.  $\$21,344 \div \$92,800 = .23$ ;  
 $23\% \text{ of } \$11,600 = \$2,668$ .

10.  $\$2,843 + \$6,217 + \$3,740 + \$1,700 = \$14,500$ ;  
 $\$5,075 \div \$14,500 = .35$ ;  $35\% \text{ of } \$1,700 = \$595$ .

11.  $\$128.00 \div 32\% = \$400$ .

12.  $900 \times \$3.90 = \$3,510.00$ ;  
 $8\% \text{ of } \$3,510.00 = \$280.80$ ;  
 $900 \times \$ .075 = \$67.50$ ;  
 $\$280.80 + \$94.50 + \$67.50 = \$442.80$ ;  
 $\$3,510.00 - \$442.80 = \$3,067.20$ .



## Appendix C.

## Appendices

Sections 67-70, 71-72.

Exercises 13-16 (for Sections 67-70),  
and Exercise 1 (for Sections 71-72).

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$$13. \quad 68 + 42 = 110; \quad 200 - 110 = 90;$$

$$68 \times \$4.25 = \$289.00;$$

$$42 \times \$4.05 = \$170.10;$$

$$90 \times \$3.90 = \$351.00;$$

$$\$289.00 + \$170.10 + \$351.00 = \$810.10;$$

$$10\% \text{ of } \$810.10 = \$81.01;$$

$$\$80.00 + \$31.50 + \$81.01 = \$192.51;$$

$$\$810.10 - \$192.51 = \$617.59.$$

$$14. \quad 1,500 \times \$2.75 = \$4,125.00;$$

$$\$4,125.00 \times 6\% = \$247.50;$$

$$\$247.50 + \$285.00 = \$532.50;$$

$$\$4,125.00 - \$532.50 = \$3,592.50.$$

$$15. \quad 400 + 150 = 550; \quad 650 - 550 = 100;$$

$$400 \times \$5.25 = \$2,100.00;$$

$$150 \times \$5.80 = \$870.00;$$

$$100 \times \$6.10 = \$610.00;$$

$$\$2,100 + \$870 + \$610 = \$3,580;$$

$$650 \times \$0.45 = \$292.50;$$

$$\$292.50 + \$34.50 = \$327.00;$$

$$\$2,100.00 - \$327.00 = \$1,773.00.$$

$$16. \quad \$105.00 \div 7\% = \$1,500.00;$$

$$\$1,500.00 \div \$0.60 = \$2,500.00.$$

$$17. \quad 2\% \text{ of } \$45,000 = \$900;$$

$$\$8,000 - \$400 = \$7,600;$$

$$\$7,600 \div 5 = \$1,520;$$

$$\$900 + \$1,520 = \$2,420.$$

Appendixes. Appendix C.  
Sections 71-72.  
Exercises 2-10.

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Sections 71-72  
(continued).

$$2. \quad \$12,000 - \$7,200 = \$4,800;$$

$$\$7,600 - \$4,800 = \$2,800;$$

$$\$2,800 \div 4 = \$700.$$

$$3. \quad \$9,600 - \$1,200 = \$8,400;$$

$$\$8,400 \div 8 = \$1,050.$$

$$4. \quad \$1,800.00 \times 7\% = \$126.00;$$

$$\$126.00 \div 12 = \$10.50.$$

$$5. \quad 9\% \text{ of } \$5,860.00 = \$527.40;$$

$$\$527.40 \times 5 = \$2,637.00;$$

$$\$5,860.00 - \$2,637.00 = \$3,223.00.$$

C.  $17,000 \div 51,000 = .33\frac{1}{3}$ ;  $33\frac{1}{3}\% \text{ of } \$6,000 = \$2,000$ ;  
 D.  $6,375 \div 51,000 = .125$ ;  $12.5\% \text{ of } \$6,000 = \$750$ ;  
 E.  $12,750 \div 51,000 = .25$ ;  $25\% \text{ of } \$6,000 = \$1,500$ ;  
 F.  $14,875 \div 51,000 = .29\frac{1}{8}$ ;  $29\frac{1}{8}\% \text{ of } \$6,000 = \$1,750.$

$$7. \quad \$3.40 + \$3.00 + \$2.80 = \$9.20;$$

$$\$9.20 + 30\% (\$2.76) = \$11.96;$$

$$\$11.96 + 5\% (\$.60) = \$12.56.$$

$$8. \quad \$280.00 \div 8\% = \$3,500.00.$$

$$9. \quad \$60.00 - 20\% (\$12.00) = \$48.00;$$

$$\$48.00 - 16\frac{2}{3}\% (\$8.00) = \$40.00.$$

$$10. \quad \$5.70 + \$6.90 + \$1.80 = \$14.40;$$

$$\$14.40 \times 15\% = \$2.16;$$

$$\$14.40 - \$2.16 = \$12.24;$$

$$\$12.24 + 10\% (\$1.22) = \$13.46.$$



# Appendix C.

Appendices.

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Sections 71-72, 73-76.

Exercises 11-13 (for Sections 71-72),

and Exercises 1-3 (for Sections 73-76).

$$11. \$50.00 - 20\%(\$10.00) = \$40.00;$$

$$\$40.00 - 10\%(\$4.00) = \$36.00.$$

$$12. \$6.25 + \$28.50 + \$16.50 = \$51.25;$$

$$\$51.25 \times 15\% = \$7.69;$$

$$\$51.65 - \$7.69 = \$43.96;$$

$$\$43.96 \times 20\%(\$8.79) = \$52.75.$$

$$13. \$17.00 - 33\frac{1}{3}\%(\$5.67) = \$11.33;$$

$$\$11.33 + 15\%(\$1.70) = \$13.03.$$

$$1. \$10,000 + \$16,000 = \$26,000;$$

$$\$10,000 \div \$26,000 = 38.5\%;$$

$$38.5\% \times \$16,120 = \$6,200.$$

$$2. \$24,000 + \$36,000 + \$60,000 = \$120,000;$$

$$\$124,600 + \$36,000 = \$160,600;$$

$$\$204,000 - \$160,600 = \$43,400;$$

$$\text{Blair: } \$24,000 \div \$120,000 = 20\%; 20\% \text{ of } \$43,400 = \$8,680;$$

$$\text{Thomas: } \$36,000 \div \$120,000 = 30\%; 30\% \text{ of } \$43,400 = \$13,020;$$

$$\text{Orso: } \$60,000 \div \$120,000 = 50\%; 50\% \text{ of } \$43,400 = \$21,700.$$

$$3. \$20,000 + \$40,000 + \$60,000 = \$120,000;$$

$$8\% \text{ of } \$40,000 = \$3,200;$$

$$\$63,000 \div 3 = \$21,000;$$

$$\$21,000 + \$3,200 = \$24,200.$$

Appendices.

Appendix C.

Sections 73-76.

Exercises 4-8.

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Sections 73-76  
(continued).

$$4. \$6,000 + \$10,000 + \$20,000 = \$36,000;$$

$$\$20,520 \div 3 = \$6,840;$$

$$\text{Ansel: } \$6,000 \times 6\% = \$360; \$6,840 + \$360 = \$7,200;$$

$$\text{Petro: } \$10,000 \times 6\% = \$600; \$6,840 + \$600 = \$7,440;$$

$$\text{Furch: } \$20,000 \times 6\% = \$1,200; \$6,840 + \$1,200 = \$8,040.$$

$$5. \$17,000 + \$25,000 = \$42,000;$$

$$40\% \text{ of } \$11,400 = \$4,560; 60\% \text{ of } \$11,400 = \$6,840;$$

$$\$17,000 + \$4,560 = \$21,560.$$

$$6. \$495,694 + \$40,900 = \$536,594;$$

$$\$571,280 - \$536,594 = \$34,686;$$

$$60\% \text{ of } \$34,686.00 = \$20,811.60.$$

$$7. \$750 \times 12 = \$9,000; \$1,250 \times 12 = \$15,000;$$

$$\$15,000 + \$25,000 = \$40,000;$$

$$\$15,000 \div \$40,000 = 37\frac{1}{2}\%; \$25,000 \div \$40,000 = 62\frac{1}{2}\%;$$

$$37\frac{1}{2}\% \text{ of } \$6,488.00 = \$2,433.00;$$

$$\$9,000.00 + \$2,433.00 = \$11,433.00.$$

$$8. \$32,000 + \$24,000 + \$16,000 = \$72,000;$$

$$12 \times \$1,240 = \$14,880;$$

$$12 \times \$880 = \$10,560;$$

$$12 \times \$720 = \$8,640;$$

$$\$32,000 \div \$72,000 = 44\frac{4}{9}\%;$$

$$44\frac{4}{9}\% \text{ of } \$58,800 = \$26,133.33;$$

$$\$14,880.00 + \$26,133.33 = \$41,013.33.$$



# Appendix C-D.

Sections 73-76 - Civil Service Problems.

Exercises 9-11 (for Sections 73-76),  
and Exercises 1-5 (for Civil Service Problems).

Appendixes.

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$$\begin{aligned} 9. & \$30,000 + \$15,000 + \$5,000 = \$50,000; \\ & 12 \times \$500 = \$6,000; 3 \times \$6,000 = \$18,000; \\ & \$30,000 \div \$50,000 = 60\%; \$15,000 \div \$50,000 = 30\%; \\ & \$5,000 \div \$50,000 = 10\%; \$28,600 - \$18,000 = \$10,600; \\ & 60\% \text{ of } \$10,600 = \$6,360; 30\% \text{ of } \$10,600 = \$3,180; \\ & 10\% \text{ of } \$10,600 = \$1,060; \\ \text{Ames: } & \$6,000 + \$6,360 = \$12,360; \\ \text{Morton: } & \$6,000 + \$3,180 = \$9,180; \\ \text{Earle: } & \$6,000 + \$1,060 = \$7,060. \end{aligned}$$

$$\begin{aligned} 10. & 5\% \text{ of } \$20,000 = \$1,000; \\ & \$200 \times 52 = \$10,400; \\ & \$1,000 + \$10,400 + \$6,600 = \$18,000. \end{aligned}$$

$$\begin{aligned} 11. & 500 \times \$100 = \$50,000; \\ & 6\% \text{ of } \$50,000 = \$3,000; \\ & \$7,000 - \$3,000 = \$4,000; \\ & \$4,000 \div 500 = \$8.00. \end{aligned}$$

## Appendix D. (Civil Service Problems)

$$1. 8 (A).$$

$$2. 3.48 \times 0.009 = 0.03132 (C).$$

$$3. 72 \div 0.009 = 8,000 (D).$$

$$4. \frac{0.52}{0.0004} = 1,300 (D).$$

$$\begin{aligned} 5. & 87\frac{1}{2} + 33\frac{1}{3} + 12\frac{1}{2} + 88\frac{1}{3} + 66\frac{2}{3} + 37\frac{1}{2} + 62\frac{1}{2} \\ & = 87\frac{3}{6} + 33\frac{2}{6} + 12\frac{3}{6} + 88\frac{2}{6} + 66\frac{4}{6} + 37\frac{3}{6} + 62\frac{3}{6} \\ & = 388\frac{2}{6} = 388\frac{1}{3} (C). \end{aligned}$$

Appendices. Appendix D.  
Civil Service Problems.  
Exercises 6-18.

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Civil Service  
Problems (continued)

6.  $23 \times 9\frac{3}{4} = \frac{23}{1} \times \frac{39}{4} = \frac{897}{4} = 224\frac{1}{4}$  (A).

7.  $\frac{7}{8} \div \frac{2}{7} = \frac{7}{8} \times \frac{7}{2} = \frac{49}{16} = 3\frac{1}{16}$  (C).

8. A number larger than 1 divided by a fraction less than 1 will always be a larger number (D).

9.  $15^9$  (D) increased by  $\frac{1}{3}$  of itself = 212.

10.  $0.03125 = \frac{1}{32}$  (B).

11.  $0.58\frac{1}{3} = \frac{7}{12}$  (B).

12.  $\frac{27}{64} = 42.1875\%$  (B).

13.  $0.127 = 12.7\%$  (D).

14.  $125\%$  (D) of 4 is 5.

15.  $25\%$  (A) of  $26\frac{2}{3}$  is  $6\frac{2}{3}$ .

16. The percent of increase from 2 to 3 is 50% (B).

17.  $3 \times 4 = 12$ ;  $4 \times \$2.29 = \$9.16$  (C).

18.  $6 \times 12 = 72$ ;  $72 \div 2 = 36$ ;

$36 \times \$1.5 = \$5.40$ ;  $\$5.40 - \$4.86 = \$.54$ ;

$\$.54 \div 6 = \$.09$  (A).



Appendix D.  
Civil Service Problems.  
Exercises 19-28.

Appendices.

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19.  $\$1.20 \div 12 = \$.10$ ;  $10 \times \$.10 = \$1.00$ ;  
 $\$.84 \div 12 = \$.07$ ;  $15 \times \$.07 = \$1.05$ ;  
 $\$.10 + \$.07 = \$.17$ ;  $\$.17 \div 2 = \$.08\frac{1}{2}$  (E).

20.  $45 \times 225 = 10,125$  (C).

21.  $192 + 213 + 218 + 215 + 102 + 194 = 1,134$ ;  
 $1,134 \div 7 = 162$ ;  $162 \div 6 = 27$  (A).

22.  $35 \div 7 = 5$ ;  $5 \times 43 = 215$ ;  
 $4 \times 215 = 860$  (D).

23.  $72 \times 3\frac{5}{8} = \frac{72 \times 29}{8} = 261$ ;  
 $1,000 - 261 = 739$  (C).

24.  $2,415 \div 350 = 6.9$ ;  
 $6 \times 350 = 2,100$ ;  $2,415 - 2,100 = 315$ ;  
 $\$4.96 \div 8 = \$.62$ ;  $7 \times \$.62 = \$4.34$ ;  
 $6 \times \$4.96 = \$29.76$ ;  $\$29.76 + \$4.34 = \$34.10$  (E).

25.  $\frac{1}{3} + \frac{1}{2} + \frac{1}{7} = \frac{14}{70} + \frac{35}{70} + \frac{10}{70} = \frac{59}{70}$ ;  
 $59 \div 70 = 84\%$ ;  $100\% - 84\% = 16\%$  (D).

26.  $500 \times 12\frac{1}{2}\% = 62.5$ ;  
 $500 \div 62.5 = 8$  (D).

27.  $\frac{2}{5}\% = \frac{4}{10}\% = .4\% = .004 = \frac{4}{1000} = \frac{2}{500}$  (D).

28.  $\$225,000 \times 9\frac{1}{2}\% = \$21,375$  (C).

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Civil Service  
Exercises (continued).

$$29. \$72.00 \div 6\% = \$1,200.00 \text{ (A).}$$

$$30. \begin{aligned} 75\% \text{ of } \$16,000 &= \$12,000; \\ \$12,000 \div \$100 &= 120; 120 \times \$2.50 = \$300.00; \\ 120 \times \$ .60 &= \$72.00; 120 \times \$ .65 = \$78.00; \\ \$300.00 + \$72.00 + \$78.00 + \$35.00 &= \$485.00 \text{ (A).} \end{aligned}$$

$$31. \begin{aligned} \$450 \div \$100 &= 4.5 = 5; \\ 5 \times \$ .25 &= \$1.25; \$6.48 + \$1.25 = \$7.73 \text{ (D).} \end{aligned}$$

$$32. \begin{aligned} 3\frac{1}{2}\% \text{ of } \$14,040 &= \$491.40; \\ \$491.40 \div 12 &= \$40.95 \text{ (C).} \end{aligned}$$

$$33. \begin{aligned} 3\frac{1}{2}\% \text{ of } \$14,400 &= \$504.00; \\ 6\% \text{ of } \$14,400 &= \$864.00; \\ \$864.00 - \$504.00 &= \$360.00; \\ \$360.00 \div 12 &= \$30.00 \text{ (C).} \end{aligned}$$

$$34. \begin{aligned} \$876.00 + \$8.50 &= \$884.50; \\ \$884.50 - \$26.00 &= \$858.50; \\ 3\% \text{ of } \$858.50 &= \$25.76; \\ \$858.50 - \$25.76 &= \$832.74 \text{ (E).} \end{aligned}$$

$$35. \begin{aligned} \$960.00 \times 12\frac{1}{2}\% &= \$120.00; \\ \$3,600.00 \div \$120.00 &= 2 \text{ yr. 6 mos. (A).} \end{aligned}$$

$$36. \begin{array}{r} 5 \text{ hr. } 13 \text{ min.} \\ 3 \text{ hr. } 49 \text{ min.} \\ + \quad 14 \text{ min.} \\ \hline 8 \text{ hr. } 76 \text{ min.} = 9 \text{ hr. } 16 \text{ min. (B).} \end{array}$$



Appendix D.  
Civil Service Problems.  
Exercises 37-42.

Appendix

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37.  $\$2,070.85 \div 1,235 = \$1.68;$   
 $\$1.68 \div 16 = \$.105$  (A).

38.  $25 \text{ ft.} \times 36 \text{ ft.} = 900 \text{ sq. yd.}$  (D).

39.  $8 \times 20 = 160;$   $160 \div 10 = 16;$   
 $16 \times 16 = 256$  (C).

40.  $900 \div 150 = 6;$   
 $720 \div 80 = 9;$   
 $6 + 9 = 15;$   
 $1,620 \div 15 = 108$  (A).

41.  $25 \times 10 = 250;$   
 $250 \div 60 = 4 \text{ min. } 10 \text{ sec.};$   
 $4 \text{ min. } 10 \text{ sec.} \times 7 = 29 \text{ min. } 10 \text{ sec.}$  (B).

42.  $444 \div 12 = 37;$   
 $\$.70 \times 37 = \$25.90;$   $12 \times \$25.90 = \$310.80.$   
 $\$.50 \times 90 = \$45.00;$   
 $\$.02 \times 300 = \$6.00;$   
 $\$45.00 + \$6.00 = \$51.00;$   
 $\$310.80 - \$51.00 = \$259.80$  (E).

Indices

# Appendix D.

Civil Service Problems.

Exercises 43-46.

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Civil Service  
Problems (continued)

43.  $33\frac{1}{3}\%$  of  $\$150,000 = \$50,000$ ;  
 $\$150,000 - \$50,000 = \$100,000$ ;  
 $\$100,000 + \frac{1}{4}(\$25,000) = \$125,000$ ;  
 $\$125,000 \div \$150,000 = 83\frac{1}{3}\%$  (D).

44.  $5 \times \$920 = \$4,600$ ;  
 $5 \times \$90 = \$450$ ;  $\$4,600 + \$450 = \$5,050$ ;  
 $5 \times \$13,522 = \$67,500$ ;  
 $\$67,500 + \$16,500 = \$84,000$ ;  
 $\$84,000 + \$5,050 = \$89,050$ ;  
 $\$139,200 - \$89,050 = \$50,150$ ;  
 $5 \times \$50,150 = \$250,750$ ;  
 $\$250,750 - \$249,000 = \$1,750$  (B).

45.  $168 \times 5\frac{1}{2} = 924$ ;  
 $83,160 \div 5 = 16,632$ ;  
 $16,632 \div 924 = 18$  (B).

46.  $18 \div 12 = 1\frac{1}{2}$ ;  
 $6 \div 1\frac{1}{2} = 4$ ;  
 $12 + 4 = 16$ ;  
 $16 \times 1\frac{1}{2} = 24$  (E).